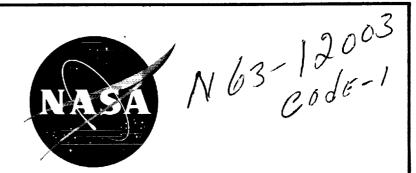
NASA TN D-1569



TECHNICAL NOTE

D-1569

MONTHLY AND ANNUAL WIND DISTRIBUTIONS

AS A FUNCTION OF ALTITUDE FOR

SANTA MONICA, CALIFORNIA

(PACIFIC MISSILE RANGE)

By J. W. Smith

George C. Marshall Space Flight Center Huntsville, Alabama

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
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SUMMARY

Wind and wind shear based on four daily rawinsonde observations for five years of record at Santa Monica, California, have been serially completed, analyzed, and tabulated at standard cumulative percentage frequency (cpf) levels for each kilometer of altitude up to 27 km.

The median annual Santa Monica wind speed varies from 2 m/sec at the surface to about 24 m/sec at 12 km altitude. The median speed then decreases with altitude to less than 6 m/sec in the 20-22 km level, after which it gradually increases with altitude. Wind speeds vary from calm, which is frequent near the surface, to an extreme of 89 m/sec at 12 km altitude. This extreme occurred on March 26, 1958. Winds are lower in summer than in winter. Speeds of 50 m/sec are rare in summer, and do not occur as much as 1 percent of the time, at any altitude, from July through September. In January and February wind speeds ≥50 m/sec are recorded more than 13 percent of the time in the maximum wind speed region (11 to 13 km altitude).

In the first kilometer northeasterly winds prevail in all months. From the land-sea breeze layer to about 16 km, westerly winds prevail in all seasons. These winds are southwesterly from May through September and northwesterly in the colder months. Above 16 km, easterly winds prevail in summer, and the speed increases with altitude.

Westerly winds are stronger than easterly winds except near 13 km altitude in summer, andnortherly winds are generally stronger than southerly winds.

The wind shear is not directly proportional to wind speed; but, as a rule, the highest shears for altitudes \$\ \equiv 1000\$ m are found in regions of highest wind speeds. The median wind shear is high in the friction layer (near the surface) after which it decreases to about 7 km altitude. The wind shear then increases to its highest median value of about 0.005 per second (per 1000 m layer) in the 10-17 km region. The highest shear observed in this five-year period was 0.0414 per second. This occurred in the 13 to 14 km layer on February 1, 1960. In the lower stratosphere, shear decreases to about half of its tropospheric peak. Zonal wind shears are greater than meridional wind shears at comparable levels, and winter wind shears are stronger than summer wind shears.

SECTION I. INTRODUCTION

Accurate and reliable information on the horizontal wind environment in a detailed form convenient for engineering uses is required for various problems in the field of missile and space vehicle design and performance, as well as for range safety. In general, the vertical wind environment may be neglected (Ref. 1) except for elastic body study wherein gusts and turbulence features of the atmosphere must be included. A wind analysis (Ref. 2) has been made for Santa Maria, California, about 150 km northwest of Pt. Mugu. The wind record for Pt. Mugu is too brief for statistical analysis. To obtain more valid statistical wind information, a study was accomplished based on a five year period of rawinsonde observations made at Santa Monica, California, located about 60 km west-southwest of Pt. Mugu.

The local geographical features are such that the surface wind and winds in the frictional layer (below about 2 km) at Santa Monica, California, are probably not representative of the other stations in the Pacific Missile Launch Area (Fig. 1). However, the upper level winds appear to be sufficiently similar (Ref. 3) to warrant use of the Santa Monica, California, observations to provide statistical values representative of the Pacific Missile Range Launch Area. This is especially true when the short period of record for reliable data at the nearby stations is taken into consideration.

Relatively new techniques have been employed to minimize the inaccuracies common to most high altitude wind studies. These techniques include serial completion of the wind observations to 27 km altitude and elimination of gross errors by methods described in Ref. 4. Five years' record is still not sufficient to cover all possible wind variations, so uncertainties may still exist in some details of the wind distributions. This is, however, the most detailed statistical analysis currently available, which represents the larger scale wind flow characteristics in the Pacific Missile Range Launch Area.

The information presented in this report is the result of wind environment investigations conducted by the Aerophysics and Astrophysics Branch, Aeroballistics Division, Marshall Space Flight Center for application to space vehicle design studies. The contributions of Messers. Paul Harness and Dick Moore, in performing the statistical computations necessary to produce the tabular values used in this report, are gratefully acknowledged. The idealized percentages of selected wind speeds in the maximum wind speed region were determined by Mr. G. E. Daniels.

SECTION II. SOURCE OF DATA

Upper air observations by the AN/GMD-1A sounding system were made at Long Beach and Santa Monica, California, from January 1, 1956, to April 17, 1956. The Long Beach, California, observations were made at 0300, 0900, 1500, and 2100 GCT. However, the bulk of the observations were made at Santa Monica, California, about 60 km west-southwest of Pt. Mugu. They began on April 18, 1956, and continued through December 31, 1960. After May 31, 1957, the observations were changed to 0000, 0600, 1200, and 1800 GCT.

The raw data were obtained on punched cards from the National Weather Records Center at Asheville, North Carolina. The four daily observations were serially completed at 1 km intervals up to 27 km altitude by the National Weather Records Center under contract to NASA, Marshall Space Flight Center, Aeroballistics Division. In order to complete the data it was necessary to insert missing or prematurely terminated observations by interpolation, extrapolation, or by the transfer of data from nearby Pt. Mugu or San Nicolas Island, California.

The interpolations and extrapolations were made through time and three-dimensional space considerations. Off-time and nearby station data were used in conjunction with the originally observed data to perform height-time cross-sectional and horizontal analyses. The height-time cross section was the principal analysis record used. It was prepared for the entire period of record. The original observations were plotted at their respective time intervals for each level of the cross section. The wind direction was plotted to the nearest degree while the wind speed was plotted to the nearest meter per second. An isotach analysis of the data not only provided the missing grid point values, but aided in finding computational errors in the original data. Original wind values were changed only when they were considered definitely erroneous (determined through examination of original computation forms), or they could not have occurred when consideration was given to the synoptic features at the time. All work was performed by professional meteorologists under the supervision of Dr. Harold Crutcher, National Weather Records Center, and Mr. Orvel E. Smith, Marshall Space Flight Center.

A unique feature of the serially complete wind records is the inclusion of a coded identifier to distinguish the data characteristics for each level of each observation. The code indicates whether the data were observed, corrected observed (transferred), interpolated or extrapolated.

SECTION III. METHOD OF COMPUTATION AND PRESENTATION

Except for a few minor computer program modifications, the data in this report were computed and presented in the same manner as the wind distributions for the Atlantic Missile Range at Cape Canaveral, Florida (Ref. 5). Since wind distributions are generally not normal, that is, not Gaussian, the multiples of standard deviation have been avoided in favor of the corresponding levels of cumulative percentage frequency (cpf). For example, the value of the variate of 84.1 cumulative percentage frequency corresponds to the mean plus one (1) standard deviation for a normal distribution. For zonal and meridional wind components, plus and minus signs are used to indicate wind direction. Therefore, negative wind values may exceed the positive winds.

All wind distribution tables are arranged to show the highest and lowest values observed, plus the 11 following percentage levels of the probability of occurrence: 0.135, 2.28, 15.9, 50, 68, 84.1, 90, 95,

97.72, 99, and 99.865 percent. Blanks are frequent in the 0.135 and 2.28 cpf columns because extrapolations were not made to fill them. In the monthly cases, one observation is more than 0.135 percent of the data. Hence, the 0.135 percent column is blank for all monthly tabulations.

The wind distribution data have been arranged in 10 sets of tables by monthly and annual reference periods.

To determine the vector wind shears, the partial derivative of the wind vector with respect to altitude is computed over 1000 m altitude intervals by the formula:

intervals by the formula: $S = \frac{\sqrt{\Delta W_{x}^{2} + \Delta W_{z}^{2}}}{\Delta h}$ where ΔW_{x} is the zonal wind finite difference $(W_{x_{n}} - W_{x_{n-1}})$ and ΔW_{z} is the meridional wind finite difference (W $_{z_n}$ - W $_{z_{n-1}}$) between two altitude levels with $\Delta h = 1000$ m. Shears are first computed for the individual wind profiles: then shear frequency distributions are tabulated as for other wind data.

The zonal and meridional shears are computed by taking the partial derivative of their respective wind components with respect to altitude over 1000 m altitude intervals.

For a quick visual presentation of Pacific Missile Range wind data a time altitude cross section of the median zonal wind components is shown in Fig. 2, and the median meridional components are similarly presented in Fig. 3. The data used in Fig. 4 were obtained from the Scalar Wind Distribution Tables (Tables I-2 through I-13). The altitude of the high wind speed layer was found to vary inversely with the wind speed. Therefore, it was necessary to use different altitude layers for the various wind speeds selected. The information in Fig. 4 should be useful in making judgments relative to limiting vehicle tests based on wind speeds in the maximum wind speed region between 8 and 14 km. Also, the graph shows the seasonal dependence of high wind speeds.

The values in Fig. 4 were obtained by averaging wind speeds for each cumulative percentage frequency throughout the maximum wind speed region for each month. The interpolation of the percentage values for the selected wind speeds (idealized) was made by use of normal probability graph paper. The irregularity of the data for speeds of 68 and 80 m/sec may be caused by the small size of the sample or it may be due to a transition of weather regimes. Further study will be needed to clarify this point.

SECTION IV. ACCURACY OF DATA

A. GENERAL CHARACTERISTICS

Rawinsonde observations are subject to various errors. These errors have been treated in detail by various authors (Refs. 6, 7, 8, 9, 10, 11, 12, 13, and 14). When working with a large volume of rawinsonde data on punched cards, it is impossible to eliminate all errors. Errors, which give rise to extreme and obviously erroneous wind data, can often be traced to punched card errors or to elevation angles so low as to render accurate computation impossible. In this study, the larger errors in the wind data have been detected and eliminated by methods described in Ref. 4.

To avoid bias in the wind data due to decrease in number of observations with altitude, the observations in this study were made serially complete. This was accomplished by filling in the relatively few short or missed observations by interpolation, extrapolation, or transfer of data from nearby stations. The Santa Monica, California, data were serially completed to 27 km by the National Weather Records Center as described in Section II. In order to minimize bias in wind distribution computations due to calms (wind speeds of less than $\frac{1}{2}$ m/sec, assigned the value of zero), whenever the wind was divided into components, one-half of all calms were arbitrarily assigned to each component.

In spite of all corrections it should be understood that errors exist and, in general, they increase with wind speed, altitude, and distance of balloon from point of observation. Hence data below 10 km altitude may be considered reasonably accurate, but data at higher levels are questionable under some observational conditions. Insofar as was technically feasible, we have endeavored to correct and verify questionable data points. Computed cumulative percentage frequency values nearest the median are most reliable, but accuracy decreases toward the outer limits of the frequency distribution and little statistical confidence can be assigned to extreme values. A five year period of observation is not extensive enough to show all possible wind variations. The methods which were used to compute this wind distribution are, for the most part, described in Ref. 15.

B. WIND SPEED

The U.S. Army Signal Research and Development Laboratory (Ref. 13) computed the rms vector error of wind speed at 12 km altitude with a 6 degree elevation angle to exceed 9 m/sec. This elevation angle is sometimes observed with high wind speeds. Most winds are of lower speed and will have smaller errors. An rms error of about 1.5 m/sec is applicable for wind velocity measurements at lower altitudes.

C. WIND SHEAR

The fact that shear is computed to four decimal places is not to be construed as a measure of the accuracy of the data. A study by Salmela and Sissenwine (Ref. 14) shows that the AN/GMD-1A system may provide wind and wind shear observations with relatively large errors. As noted earlier, considerable effort was made to resolve all questionable data points and, thereby, hopefully prevent the inclusion of data with large errors. Shear errors are greater for the smaller intervals of altitude. Since the shear values in this study were computed for 1000 m intervals, they are as reliable as can reasonably be determined from the basic raw data. If the measurement errors can be considered as random occurrences, then the resulting statistics on wind and wind shears can be considered to be highly representative of the central tendency, i.e., mean or median. On the other hand, if the basic measurements have unknown bias errors then the statistics as presented, in this report, are also subject to the effects of the bias errors.

SECTION V. DISCUSSION OF DATA

A. WIND SPEED

The Santa Monica median annual wind speed varies from 2 m/sec at the surface to about 24 m/sec at 12 km altitude (Table I-1). The median wind speed then decreases with altitude to less than 6 m/sec in the 20-22 km level, after which it gradually increases with altitude to 9 m/sec at 27 km. The wind speeds will continue to increase with altitude above this level as similar to the winds for the Atlantic Missile Range (Ref. 11). Winds near calm may be encountered at almost any altitude. Calms are especially frequent at the surface. February is

the windiest month of the year in the high speed wind region (Fig. 3) from 9 to 13 km. However, at Cape Canaveral, March is the strongest wind month (Ref. 5). The highest wind observed in this five year period was 89 m/sec which occurred at 12 km altitude on March 26, 1958. Winds almost as high occurred in all winter months, but during the summer a wind of 50 m/sec was quite rare and occurred less than one percent of the time from July through September. Winds of \geq 50 m/sec occur more than 10 percent of the time in winter in the high speed wind region near 11 km altitude. The highest wind reported in July was 51 m/sec at 12 km altitude.

B. WIND DIRECTION

From the median zonal wind component chart (Fig. 2 and Table II) and the median meridional wind component chart (Fig. 3 and Table III), it may be seen that northeasterly winds prevail throughout the first km in all seasons. In late fall the northeasterly winds prevail up to about 3 km altitude. These low level northeasterly winds are caused by the land and seabreeze effect expected at any coastal location. Above the land and seabreeze layer, westerly winds prevail throughout the year to 16 km altitude. These winds are southwesterly from May through September and west or northwesterly in the colder months. The southerly wind component is quite strong in mid-summer, reaching a median speed of 9 m/sec at 13 km altitude in August. This is caused by a high pressure area, which is centered over the south central states at high levels in summer, and a low pressure trough along the east Pacific Coast (Ref. 16). This high-low pressure system reverses in winter to give mostly westerly winds with a small northerly component. Above 20 km altitude, easterly winds prevail in summer and their speed increases with altitude similar to the winds over the Atlantic Missile Range.

For the altitudes studied here, easterly winds are not generally as strong as westerly winds (Tables IV and V). Median values of easterly wind components are less than 4 m/sec in the troposphere and rarely exceed 30 m/sec maximum speed at any altitude, whereas the median westerly wind components reach 19 m/sec at 12-13 km, and an extreme westerly component of 87 m/sec was recorded at 11 km in February.

At most levels the median values of southerly wind components are slightly less than for northerly wind components at comparable

levels (Tables VI and VII), although the differences are not as large as between easterly and westerly components. The extreme northerly wind component recorded was 79 m/sec at 8 km altitude in December as compared to an extreme southerly component of 64 m/sec, which occurred at an altitude of 10 km in April.

Since Santa Monica is about 60 km east-southeast of Pt. Mugu (Fig. 1), the wind data in this analysis may differ from Pt. Mugu winds in a number of ways although large differences are not expected in the upper altitude layers. An analysis of upper level winds made for Vandenberg Air Force Base and based on five years of wind observations at Santa Maria, California, has been made by Pitchford (Ref. 2). Santa Maria is about 150 km northwest of Pt. Mugu. A comparison with the Santa Monica winds is difficult because of differences in the method of computation and the different reference periods employed. Wind shears are not given in the Vandenberg Air Force Base study (Ref. 2).

C. WIND SHEAR

From Table VIII it may be seen that the median vector wind shear is large in the friction layer near the earth's surface, followed by a moderate decrease to about 7 km altitude. The median then increases to about 0.005 per second in the 8-17 km altitude region where the strongest winds in the troposphere are found. In the lower stratosphere to about 20 km altitude, the vector wind shear gradually decreases to about one-half of the peak tropospheric values. Extreme vector wind shears increase steadily from about 0.02 per second near the surface to about 0.04 per second near 13 km altitude followed by a gradual decrease to about 0.02 per second near 21 km. The extreme shear observed in this five year period was 0.0414 per second, which occurred between 13 and 14 km altitude in February. Winter wind shears are generally stronger than summer wind shears at comparable levels as would be expected from the stronger winter winds.

While vector wind shears are largest in the high wind speed region, shear is not perfectly correlated with wind speed. This is especially true for wind shear over the smaller altitude intervals (i.e. < 1000 m). Vector wind shear, in part, is a function of change in wind direction. The rate of wind direction change with respect to altitude can be greater for low speeds than for high wind speeds. Hence, vector wind shear values for low wind speeds may be as large as shears for high wind speeds.

Zonal wind shears (Table IX) are greater than meridional wind shears (Table X), as would be expected from the stronger zonal wind components. The difference between the zonal and meridional wind shears is generally not large except above 15 km altitude. Above 15 km altitude the median zonal wind shear components are very large, and they exceed the median meridional shears by as much as 66 percent in the 19-20 km level.

SECTION V. RECOMMENDATIONS

In view of the limitations of wind observations, it is recommended that consideration be given to the use of either the 95 or 99 percent monthly values for space vehicle design criteria in preference to the use of extreme values. In monthly tabulations, use of the 99.865 percent profile should also be avoided since it is almost identical with the extreme profile. Observe, for example, in the July vector wind shear distribution (Table VIII), how the extreme and quite possibly erroneous shear value at 14-15 km is avoided by use of the more statistically reliable 99 percent cumulative percent frequency.

It should be noted that the wind statistics, as defined in this report, do not represent the random "turbulent or gust" characteristics of the wind profile. These characteristics are filtered out by the basic measuring system and data reduction techniques. Therefore, an allowance must be made to incorporate the turbulence or gust characteristics into the control and structural design studies, especially for the elastic body analysis. This may be accomplished in several different ways, depending upon the design philosophy employed. However, when allowances for the turbulent or gust characteristics have been made, then the basic wind flow statistics in this report may be used to establish design criteria.

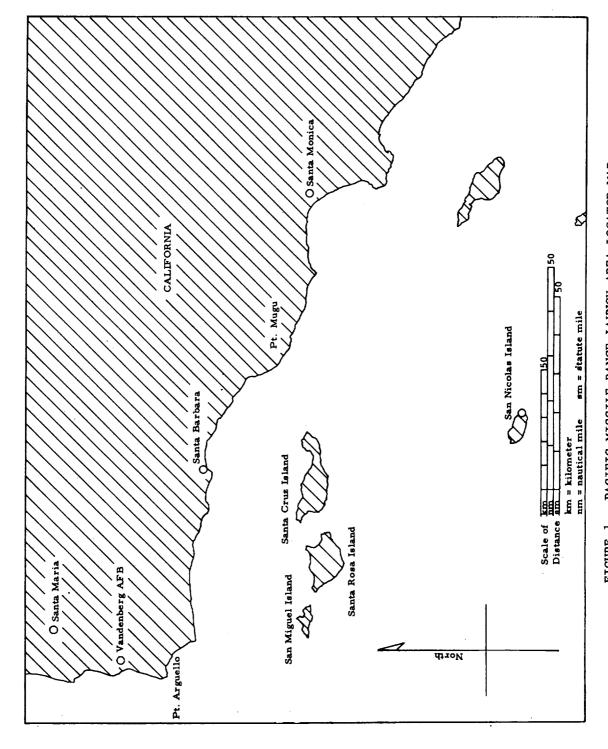


FIGURE 1. PACIFIC MISSILE RANGE LAUNCH AREA LOCATOR MAP

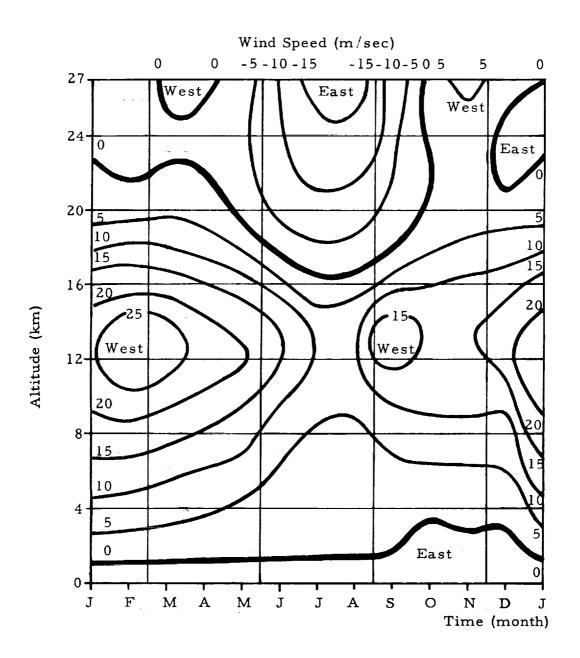


FIGURE 2. MEDIAN ZONAL WIND COMPONENT SANTA MONICA, CALIFORNIA

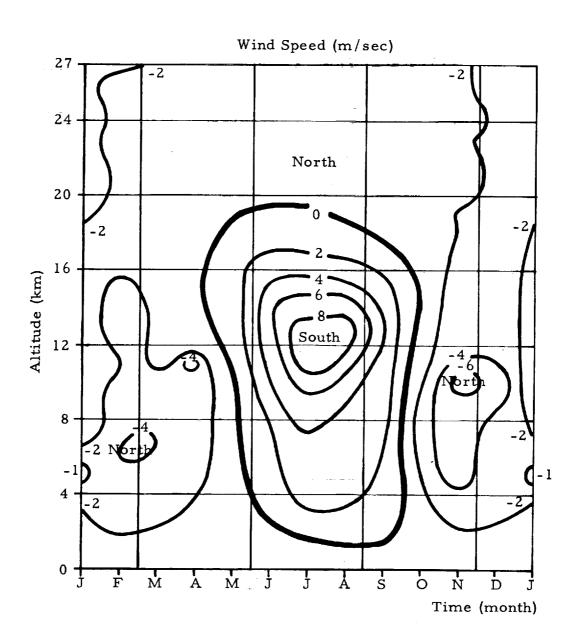


FIGURE 3. MEDIAN MERIDIONAL WIND COMPONENT SANTA MONICA, CALIFORNIA

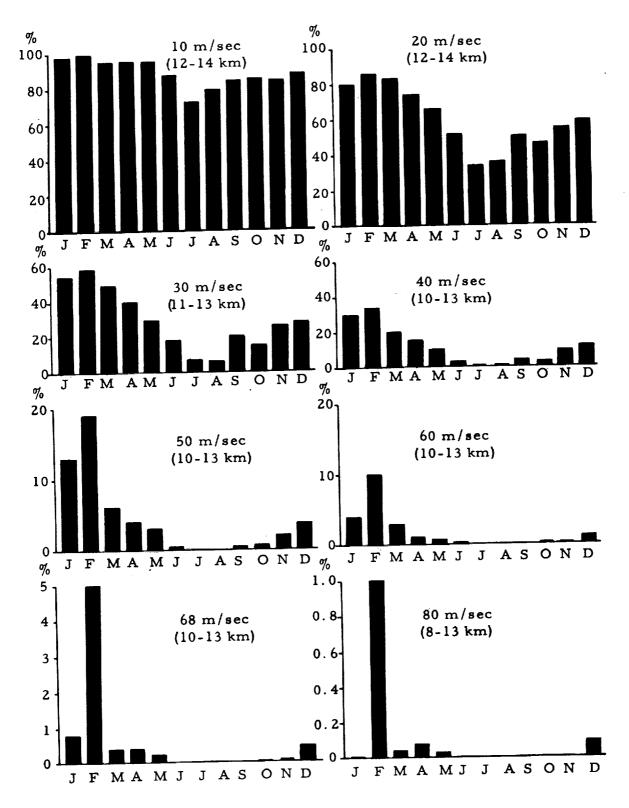


FIGURE 4. PERCENTAGE OF TIME THAT SELECTED WIND SPEEDS ARE EXCEEDED IN THE HIGHEST WIND SPEED ZONE (TROPOSPHERE); SANTA MONICA, CALIFORNIA

TABLE I	Page
Distribution of Scalar Winds	
Unit: meters per second	
Table I-1 Annual	16
Table I-2 January	17
Table I-3 February	18
Table I-4 March	19
Table I-5 April	20
Table I-6 May	21
Table I-7 June	22
Table I-8 July	23
Table I-9 August	24
Table I-10 September	25
Table I-11 October	26
Table I-12 November	27
Table I-13 December	28

			TABLE	I-1 I	ISTRIBU	JTION O	F SCALA	AR WIND	s			sc	ALAR W	IND DIST	RIBUTI	ON
STATIO	ON: RENCE F	ERIOD:		SANTA N		CALIFO	ORNIA					SA	NTA MC	NICA, C	ALIFOR	NIA
STATIC	ON ELEV	ATION:		125 feet	or 38.1	meters k	ASL						AN	INUAL		
STATIC	ON COOL	DINATE	: 5 :	34.01 da	g N, 118	. 27 deg	w									
								1 1071	A13 1.2	105/	. <u></u>					
PERIO	D OF OR	SERVAT	ION:	Santa Me	ach, Gali mica, C	ifornia Alifornia	April	1, 1956- 18, 1956	April 17 -Decemb	er 31, i	760					
DATA:	SOURCE	:		National U. S. W	eather B	ureau						NC	OF OF	7308	EACH L	EVEL:
PREPA	RED BY	`ı		National Marshal Aarophy	Aeronas Space I sics and	Flight Ce Astroph	Space A	roballie	ation tics Divis intsville,	ion Alaban	14		me	UNITS:	ond	
Alt.	Min.	Pct.		Februar			TIVE P	ERCENT	AGE FRI	EQUENC	Y			Max	Pct.	Alt.
(MSL) km	Speed	Freq	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq	(MSL) km
€fc	calm	17.16				2.0	2.9	4.5	5.2	7.4	8.5	12.5	22.0	0.01	∎ſc	
1	calm	1.87		0.0	1.0	2.6	3.7	5.5	6.7	8.7	10.8	13.2	17.7	23.0	0.01	1
2	calm	0.27		0.4	2.1	4.7	6.4	8.7	10.1	14.4	16.8	23.1	29.0	0.01	2	
3	calm	0.14	_	1.0	3.2	7.0	9.4	12.8	14.7	20.2	22.9	30.0 38.0	41.0 50.0	0.01	3	
~ 4	calm	0.08	0.0	1.0	3.9	8.6	11.9	16. 2 19: 1	18.8 22.2	21.9 26.4	25.0 30.6	28.8 35.2	46.5	60.0	0.01	5
5	calm	0.11	0.0	1.2	4.2	10.1	13.9 16.0	22.2	25.7	30.7	36.1	42.4	56.1	68.0	0.01	6
6	calm	0.04	0.0	1.8	5.8	13.5	18.3	25.3	29.3	35.2	41.8	49.6	63.1	81.0	0.01	7
8	1.0	0.51	0	2.2	6.9	15.6	21.2	28.9	33.4	39.7	47.5	54.8	70.1	85.0	0.01	8
9	1.0	0.34		2.6	7.9	17.9	24.0	32.0	37.0	43.7	51.7	59. Z	70.5	88.0	0.01	9
10	calm	0.01	0.4	3.1	9.3	20.4	27.0	35.4	40.1	47.5	55.2	61.4	75.7	86.0	0.03	10
11	1.0	0.33		3.7	10.8	22.5	29.3	37.7	42.5	50.5	59.7	66.6	79.0	88.0	0.01	11
12	calm	0.01	1.0	4.2	11.5	23.5	30.0	37.4	42.1	49.7	57.8	66.3	79.1	89.0	0.01	12
13	1.0	0.11	1.0	4.2	11.6	22.9	28.7	35.6	39.7	46.5	53.3	59.2	75.1	83.0	0.01	13
14	1.0	0.12	1.0	4.1	10.7	20.9	26.0	32.0	35.7	41.1	47.0	52.9	63.1	72.0	0.04	14
15	1.0	0,21		3.1	9.0	17.7	22.0	27.4	30.6	35.0	39.8	44.8	55.0	64.0	0.03	15
16	calm.	0.03	0.2	2.3	6.6	14.1	18.2	23.0	25.8	29.6	33.4	38.4	46.3	56.0	0.01	16
17	calm	0.04	0.1	1.5	4.3	10.3	14.1	18.6	20.9	24.3	28.4	32.4	39.5	42.0	0.04	17
18	calm	0.08	0.0	1,0	3.2	7.5	10.3	14.2	16.7	19.7	23.3	27.0	32.2	42.0	0.01	18
19	calm	0.14		0.9	2.7	6.1	8.1	10.9	12.9	16.0 13.4	16.3	22.3 19.8	31.2	36.0 33.0	0.03	20
20	calm	0.19		0.7	2.4	5.5 5.4	7.4	9.8	11.6	13.3	l .	19.0	26.5	31.0	0.04	21
21	calm	0.31	l	0.5	2.3	5.8	7.9	11.0	12.3	14.1	16.4	19.6	27.0	33.0	0.01	22
23	calm	0.36		0.6	2.5	6.3	8.7	11.8	13.3	15.3	17.6	21.1	27.4	32.0	0.01	23
24	calm	0.29	I	0.6	2.6	6.8	9.6	13.0	14.7	16.6	18.9	21.9	27.3	33.0	0.01	24
25	calm	0.23		0.7	2.8	7.4	10.6	14.1	15.9	17.8	20.4	23.9	30.7	36.0	0.03	25
26	calm	0.36		0.8	3.1	8.2	11.6	15.4	17.0	19.4	22.5	26.6	33.8	43.0	0.01	26
27	calm	0.33		0.8	3.4	9.1	12.6	16.5	18.3	21.2	25.1	29.5	36.6	51.0	0.01	27

⁽²⁾ Calm denotes wind speed less than 0.5 m/sec.

			TABLE	I-2 I	DISTRIB!	O MOITU	F SCAL	AR WIND	s			sc	ALAR W	TRID DIST	TRIBUTI	ON
STATI	ON:	PERIOD:		SANTA I		, CALIF	ORNIA					SA	NTA MO	ONICA, C	ALIFOR	NIA
	ON ELE					meters !	MSL					T		I ANUAR Y		
				24 07 1	N 111	27 -	117									
STATI	ON COO	RDINATE	SS:	34.01 de	g N, 112	3.27 deg	w									
PERIO	D OF O	SERVAT	TION:	Long Be Santa Mi	ach, Cal onica, C	ifornia alifornia	January April	1, 1956- 18, 1956	April 17 -Decemb	, 1956 er 31, 1	910					
DATA	SOURCE	i:		U. S. W	eather B	r Record						NC	OF OF	35. FOR 620	EACH L	EVEL:
PREPA	ARED BY	(:		National Marshal Aerophy	Aeronas I Space I sics and	itics and Flight Ce Astroph	Space Anter, Ac	roballis	tics Divi	sion Alaban	14		m	UNITS:	ond:	
Alt.	Min.	Pet.	<u> </u>	Februar		62 CUMULA	TIVE P	ERCENT	AGE FR	EQUENC	Y			Max.	Pct.	Alt.
(MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	75.0	97.72	99.0	99.865	Speed	Freq.	(MSL) km
efc	calm	22.10				1.8	2.7	3.8	4.6	5.8	7.3	8.9	10.1	11.0	0.16	efc
1	calm	4.84			1.1	3.1	4.6	7.0	8.4	11,2	13.4	14.9	18.5	19.0	0.32	1
2	calm	0.81		0.5	2.7	6. 1	7.9	10.5	12.1	14.0	16.3	17.9	23.1	24.0	0.16	2
3	calm	0.16		2.0	5.0	10.1	12.6	16.4	18.5	21.1	22.8	26.3	32.1	33.0	0.16	3
4	calm	0.16		2.8	6.9	13.5	17.1	21.5	23.4	26.6	29.3	31,4	38.1	39.0	0.16	4
5	calm	0.16		2.7	8.2	16.0	21.2	25.9	28.7	32, 5	35.4	38, 4	44.1	45.0	0.16	5
6	2.0	0.48		3.5	10.3	18.8	24.2	29.6	33.0	36.4	40.1	42.8	60.1	61.0	0.16	6
7	calm	0.16		5.3	11.9	21.5	27.0	33.4	36, 2	41, 1	48.4	56.8	74.1	75.0	0.16	7
8	3.0	0.65		6.4	13.7	24.7	30.7	37.4	41.7	47.8	54.7	60,8	70.1	71.0	0.16	8
9	5.0	0.81		7.5	15.6	27.7	34.2	41.3	46.7	54.7	61.8	64.8	70.1	71.0	0.16	9
10	4.0	0.32		9.1	17.5	30.0	36.7	46.2	51.2	58.3	61.5	65,7	67.1	68.0	0.16	10
11	2.0	0.16		9.1	19.0	31.9	` 38.8	47.9	56, 1	61,4	66.2	69. 2	73.5	74.0	0.32	111
12	7.0	0.48		9.9	19.2	32.0	38.5	48.9	54.5	60.8	67.2	70.1	75.1	76.0	0.16	12
13	6.0	0.16		11.2	19.3	29.2	36.0	45.0	51.2	55.8	60.2	66.9	81.1	82.0	0.16	13
14	7.0	0.32	ļ	10.7	17.3	26.7	32.4	39.9	45.0	49.5	54.2	59. 2	71.1	72.0	0.16	14
15	7.0-	0.48	l	9.6	15.3	24.0	28.1	33.9	37.7	40,7	45.9	49,6	57.1	58.0	0.16	15
16	4.0	0.16		7.5	13.2	19.9	23.4	27.1	29.4	33.0	39.4	41.9	55.1	56.0	0.16	16
17	1.0	0.32		4.6	9.8	16.3	19.4	22.2	24.5	28.8	32.9	35.9	41.1	42.0	0.16	17
18	1.0	0.32		3.0	6.9	12.2	15.2	18.1	20, 1	25,0	27.3	28, 8	40.1	41.0	0.16	18
19	calm	0.16		1.5	4.5	8.9	11.6	1	16.5	19.6	22.9	26.4	35.1	36.0	0.16	19
20	calm	0.48		1.0	3.0	7.4	10.0	1	14.4	17.0	20.1	22, 4	27.1		0.16	20
21	calm	0.65		0.6	2.7	7.2	9.8	ł	14.5	17.0	20.2	22.4	28.1		0.16	21
22	calm	0.32	l	1.0	3.0	7.0	9.9	İ	15.7	20.1	21.9	24, 8	31.1	l	0.16	23
23	calm	0.65		1.0	3.5	7.6	10.0	ł	16.8	21.0	22.9	27.4	31.1		0.16	24
24	calm	0.32		1.0	3.5	8.2	11.3	1	18, 3 20, 2	21.5	28.3	27. 4 30. 4	32.1 35.5	36.0	0.16	25
25	calm	0.16		1.0	3.8 °	9.3 10.5	12.5 14.3	İ	20. 2	24.3 27.1	30.9	34.8	42.1	43.0	0.32	26
26 27	calm	0.48	1	1.1	6.5	11.9	16.1	l	25, 2	29.5	33.4	37.8	50.1	51.0	0.16	27
<u> </u>	caim	J. 63	Щ.		3.5	L <u></u> ,		L			<u> </u>	30	1			<u> </u>

⁽²⁾ Calm denotes wind speed less than 0.5 m/sec.

			TABLE	I-3	DISTRIB	UTION O	F SCAL	AR WIND	S			50	CALAR W	IND DIS	TRIBUT	ION
STATIO	ON: RENCE F	ERIOD:		SANTA FEBRU	MONICA ARY	, CALIF	ORNIA		_			S.	ANTA MO	ONICA, C	ALIFO	NIA.
	ON ELE			***	or 38.1	meters	MSL,	******						FEBRUA	RY	
										•	· · · · · · · · · · · · · · · · · · ·					
STATE	ON COO	RDINATE	.\$: 	14.01 de	sg N, 111	n. 21 deg	*									
PERIO	D OF O	SERVAT	ion:	Long Bo Santa M	ach, Cal onica, C	ifornia alifornia	Jannary April	1, 1956- 18, 1956	-April 17 -Decemb	7, 1956 Ser 31, 1	96 0					
DATA	SOURCE	:			Weather eather B		s Center					N	O, OF O	ns. FOR	EACH L	EVEI.
DREPA	ARED BY	· .		National	e. North	itics and	Space A	dinini str	ation			+		UNITS:		
PREFF	TICLD DI			Marshal Aerophy	I Space I sics and	Flight Co Astroph	nter, A	roballis anch, li	tics Divi	sion , Alabam	12		m	eters/se		
Alt.	Min.	Pct.		r cornar	y 23, 19		TIVE P	ERCENT	AGE FR	EQUENC	Y			Max.	Pct.	Alt.
(MSL) km	Speed	Freq.	0.135	2,28	15.9	50.0	68.0	84.1	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL km	
efc	calm	25.53				1.8	2.7	4.1	4.8	7.3	8, 4	14.2	15.0	0.18	sic	
1	calm	7. 22			0.8	2.8	4.5	7.2	14.4	15.7	22.2	23.0	0.18	1		
2	calm	0.70		0.5	2.9	6.7	B. 6	11.4	17.8	20.4	23.6	24.0	0.35	2		
3	calm	0.18		1.7	5.2	10.1	13.1	16.8	22.8	26.6	36. 2	37.0	0.18	3		
4	1.0	0.18		2.7	7.2	13.2	17. 1	20.9	22.8	31.3	34. 3	38.6	39.0	0.35	4	
5	1.0	0.18	-	3.0	8.4	16.3	20.3	24.7	27.3	31,9	39.3	42.6	50.2	51.0	0.18	5
6	1.0	0.18		3.4	9.4	19.1	23.3	29.1	33,1	41.3	48.6	51.7	58.6	59.0	0.35	6
7	1.0	0.18		4.3	10.7	21.6	26.5	33.4	40.2	48,6	58.0	61.6	71.2	72.0	0.18	7
8	2.0	0.35		5.2	12.0	24.9	30.4	39.0	45.0	56, 3	62.7	72, 3	81.2	82.0	0.18	8
9	1.0	0.18		5.9	14.0	27.7	34.6	44.3	51.0	59.9	66.6	76.1	87.Z	88.0	0.18	9
10	1.0	0.18		5.9	17.0	30.5	38.0	49.6	56.3	61.7	72.5	76. 3	85.6	86.0	0.35	10
11	2.0	0.18		7.2	18.9	33.2	40.9	54.0	60.4	68,4	75.0	80,4	87.2	88.0	0.18	11
12	4.0	0.18		9.9	20.7	34.2	40.6	52.7	59.2	67, 2	72.5	80,1	85.2	86.0	0.18	12
13	7.0	0.35		11.7	20.5	33.1	39.2	48.9	54.2	60.3	69.6	76. 1	82.2	83.0	0.18	13
14	5.0	0.18		11.4	19.9	29.7	35.5	43.3	48.0	56,1	61.0	66.6	71.6	72.0	0.35	14
15	5.0	0.18		10.9	18.2	25.7	30.1	37. 2	40.4	47.8	53.0	56.6	63.6	64.0	0.35	15
16	5.0	0.53		9.2	15.6	21.3	24.6	30.9	34.7	39,8	43.5	47,3	53.2	54.0	0.18	16
17	4.0	0.35		6.8	11.9	17.4	20.0	25.9	29.2	33,5	35.6	38.5	40.6	41.0	0.35	17
18	2.0	0.53		4.2	8.1	12.5	15.8	20.5	23.2	26.1	29.8	31.5	41.2	42.0	0.18	18
19	1.0	0.35		1.7	5.0	9.0	11.7	16.6	18.7	21.2	24.0	26.3	33.2	34.0 32.0	0.18	20
20	calm	0.35		0.7	2.7	6.3	8.5	12.7	16.3	19.6	23.0	26.4	31.2 30.2	32.0	0.18	21
21	calm	0.53		0.4	2.1	4.8	6.5	10.6	14.2	19,1	22.2 23.6	26, 4	32.2	33.0	0.18	22
22	calm	0.53		0.3	1.9	4.5 5.0	6.4 6.8	8.9 9.7	11.9	20.5	23.6	26, 6	30.2	31.0	0.18	23
23 24	calm	0.18 0.18		0.4	1.9	5.5	7.6	10.8	12.8	21.9	25.4	26.7	31.6	32.0	0.35	24
25	calm	4.05		0.3	2.3	6.2	8.4	12.3	15.9	22.1	26.6	28.6	32. Z	33.0	0.18	25
26	1.0	2.11		1.0	3.0	7.0	10.0	15.1	18.6	24.2	29.0	31.8	36.2	37.0	0.18	26
27	calm	0.35		0.6	3.5	7.9	11.3	17.2	21.5	28.3	33.0	35.7	42.2	43.0	0.18	27

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

⁽²⁾ Calm denotes wind speed less than 0.5 m/sec.

			TABLE	I-4 I	DISTRIBU	JTION O	F SCALA	AR WINDS	5			sc	ALAR W	IND DIST	RIBUTI	ON
STAT	TON:	ERIOD:		SANTA ?	MONICA,	CALIF	ORNIA					SA	NTA MO	ONICA, C	ALIFOR	NIA
	ION ELE			125 feet	or 38.3	meters h	ASL							MARCH		
STAT	ION COOF	RDINATE	:S:	34.01 de	g N, 118	27 deg	w									
				· · · · · ·					_							
PER	OD OF OF	SERVAT	rion:	Long Be Santa Mo	ach, Cali onica, Ca	ilifornia ifornia	January April 1	1, 1956- 18, 1956-	April 17 Decemb	, 1956 er 31, i)60			_		
DAT	SOURCE	:		National U. S. W	eather B	ureau			-			NO	or or	3S, FOR 1	EACH L	EVEL:
PRE	PARED BY	·:		National Marshal Acrophy	l Space I sics and	itics and Flight Co Astroph	Space A	dministra roballist anch, Hu	ICA DIVI	sion Alabam			m	UNITS:	ond	
Alt.	Min.	Pct.	Γ	Februar			TIVE P	ERCENT	AGE FR	EQUENC	Y			Max.	Pct.	Alt.
(MSL km		Freq	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL) km
afc	calm	24.68				1.8	3.1	4.7	5. 6	6.9	7.9	8.8	12.1	13.0	0.16	∎fc
ı	calm	4.84			1.0	3.0	4.8	6.9	8,6	10.3	12.1	13. 9	21.1	22.0	0.16	1
2	calm	0.65		0.5	2.5	5.7	7.6	10.3	11.8	13, 3	15.4	17. 9	24.1	25.0	0.16	2
3	calm	0.32		0.8	4. 3	8.9	11.3	14.9	17. 1	20. 0	23.1	26.8	40.1	41.0	0.16	3
4	calm	0.16		1.7	4.8	11.4	14.8	18.3	20.4	23. 1	27.6	32.6	41.1	42.0	0.16	5
5	calm	0.32	l	1.5	6.2	13.4	17.1	21.5	24, 2	27.8	31.2	34.6	47.1 50.1	48.0 51.0	0.16	6
6	calm	0.16		2.0	7.6	15.8	20.1	24.7	27. 1	31.6	34.1 40.4	38. 8 44. 9	53.1	54.0	0.16	7
7	calm	0.16		2.9	9.2	18.0	22.3	27.5 31.0	31. 0 34. 8	35, 3 38, 2	44.8	51.9	62.1	63.0	0.16	8
8	2.0	0.81		3.5	11.0 13.4	23.2	28.4	34.0	37. 7	42, 6	49.7	56. 2	64.1	65.0	0.16	9
9	2.0	0.32		6.0	15.6	26.3	31.3	38.8	42.6	49.4	54.8	60.8	77.1	78.0	0.16	10
10	4.0	0.16		7.2	17.3	29.3	34.8	42.0	48, 2	57, 8	64.4	70.9	81.1	82.0	0.16	11
12	3.0	0.32	-	5.8	19.4	29.8	35.3	42.3	48.8	57. 0	64.8	69.4	88.1	89.0	0.16	12
13	2.0	0.16		5.3	19.9	29.1	34.2	40.4	45, 2	50.8	55.8	59. 9	68.5	69.0	0.32	13
14	4.0	0.16	•	6.0	18.2	27.1	31.7	37.3	40.7	45.0	51.6	54. 2	59.1	60.0	0.16	. 14
15	3.0	0.16		6.3	16.3	23.7	27.8	33.2	36.0	39.6	43.9	48,8	54.1	55.0	0.16	15
16	2.0	0.16		6.2	13.9	20.5	24.1	29.2	31, 2	34. 4	38.2	40, 9	45.1	46.0	0.16	16
17	1.0	0.16		5, 2	10.7	16.4	19.7	23.9	26.3	29. 2	32.9	34, 6	41.5	42.0	0. 32	17
18	1.0	0.32		. 3. 8	7.2	11.9	15.0	19.1	21.0	23.6	27.4	30. 2	40.1	41.0	0.16	18
19	2.0	1.45		2.1	4.4	8.4	11.0	14.6	16.4	18.8	22.6	28.8	35.1	36.0	0.16	19
20	1.0	1.61		1.1	2.8	6.0	7.9	10.5	12.5	15.1	19.8	25. 9	32.1	33.0	0.16	20
21	calm	0.16		0.6	2,2	4.8	6.3	8.7	10. 3	12.7	16.4	23, 4	30.5	31.0	0.32	21
22	1.0	3.06	1		2.2	4.6	6.2	7.8	9, 2	11.2	13.8	19.4	26.1	27.0	0.16	22
23	calm	0.65	l	0.4	2.2		6.4	8.4	9.6	11.2	13.1	16,4	25.1	26.0	0.16	23
24	calm	1	l	0.6	2.4]	7.1	9.1	10.6	12.2	15.5	17. 2	21.1	22.0	0.16	24
25		1	1	0.7	2.8	6.6	8.2	10.6	11.8	14.1	16.5	17.9	21.1	22.0	0.16 0.16	25 26
26		1		0.6	2.9	7.5	9.8	12.2	13, 5	15, 7 17, 3	17.4	20.2	24.1	28.0	0.16	ı
21	calm	ρ. 46	1	1.0	3.2	8.2	11.1	14.2	15.9	17,3	17.8					

⁽Z) Calm denotes wind speed less than 0.5 m/sec.

1 2.19		-	, ii -						·_				11 AB 10	nin nic		(OV
		·	TABLE			UTION O		ALC WIND	9			30	ALAR W	מת מציי	. 410011	
STATIO Refer	ON: RENCE P	ERIOD:		SANTA :	MONICA,	CALIF	ORNIA			-		5/	ANTA MO	ONICA, C	ALIFOR	NIA
STATI	ON ELEV	ATION:		125 feet	or 38.1	meters h	MSL							APRIL		
	ON COOF	INTAL A THE		14 01 de	- N 116	. 27 deg	w									
STATE	ON COOP	(I)INV.LE	23:	34. U1 di	sg 14, 110	, or deg	•									
PERIO	D OF OB	SERVAT	NOI:	Long Bo	ach, Cal	ifornia alifornia	January April	1, 1956-	April 17	, 1956 er 31. (960					
0.4.50.4	SOURCE	<u> </u>				Record						N	OF OF	s FOR	EACH L	EVEL
DAIA	SOURCE	:		U.S. W	eather B									600		
PREPA	ARED BY			National	Aeronas	itics and Flight Co	Space A	roballis	tice Divi	sion				UNITS		
				Aerophy Februar	y 23, 19		-						m	ters/se		
Alt. (MSL)	Min. Speed	Pct. Freq.		2.28	15.9	CUMULA 50.0	68.0	ERCENT 84.1	AGE FR	95.0	97.72	99.0	99, 865	Max. Speed	Pct. Freq.	Alt. (MSI kin
km			0.135	2.26	15.9	-		5, 2	6, 2	7, 5	8.8	10,6	13,1	14.0	0.17	efc
sfc ,	calm	16.67 2.00		0.0	1.2	2.2	3.5 4.4	6,6	7.9	9.8	11.7	15,5	20.1	21.0	0.17	1
1 2	calm calm	1.00		0.3	2.3	5.2	7.3	9.7	15.7	19,0	23.5	24.0	0.33	2		
3	calm	0.17		1.1	3.6	7.7	10.4	13.7	21.6	24,5	28.5	29.0	0.33	3		
4	1.0	0.83		1.7	4.9	10.0	13.4	27.5	43.1	44.0	0.17	١.				
5	1.0	0.83		1.6	5.7	12.2	15.9	31.0	37,5	54.1	55.0	0.17	5			
	1.0	0.50		1.9	6.4	14.3	18.8	24.8	28.1	34, 3	38.8	46.0	52.1	53.0	0.17	6
7	2.0	1.33		2.7	7.6	16.6	21.5	28.7	34, 2	40,5	46.7	52, 0	69.1	70.0	0.17	7
8	1.0	0.33		3.2	9.4	19.4	24.7	32.6	39.0	45, 2	51.6	59.0	72.1	73.0	0.17	8
9	2.0	0.33		3.9	10.7	21,8	28.5	36.5	42, 2	49.0	56.3	61.0	72.1	73.0	0.17	9
10	1.0	0.17		3.6	12.2	23.7	31.1	39.7	45.1	50,3	55.1	62.0	80.1	81.0	0.17	10
11	1.0	0.17		4.6	13.7	26.1	33.0	42.8	46.5	50.0	55.1	64, 3	79.1	80.0	0.17	11
12	1.0	.0.17		4.8	14.8	26.8	32.8	41.1	45.1 41.2	49.0	55.1 51.3	59, 0 56, 6	70.1	71.0	0.17	13
13	3.0	0.17		8.1	16.1 15.1	26.5 24.3	30.6 28.3	37.4	36.8	40,3	44.0	48.3	59.1	60.0	0.17	14
14	4.0	0.17 0.17		8.2	13.9	21.1	24.8	29.2	31.7	34.8	38.1	42.0	45.5	46.0	0.33	15
15 16	2.0	0.17		7.5	11.9	17.9	21.2	25.0	27.7	30,0	32.0	36.0	43.1	44.0	0.17	16
17	2.0	0.17		4.9	9.1	14.3	17.0	20.3	22.3	24,2	26.3	28.6	31.5	32.0	0.33	17
18	1.0	0.33		2.7	6.4	10.5	12.8	15.7	18.0	19.7	21.9	25,0	30.5	31.0	0.33	18
19	1.0	1.50		1.3	3.6	7.3	9.1	11.4	12.9	15,1	17.8	22. 3	25.5	26.0	0.33	19
20	calm	0.33		0.6	2.2	5.2	6.8	8.5	9.7	12,2	15.7	20.3	23.1	24.0	0.17	20
21	calm	0.50		0.2	1.7	4.0	5.4	7.1	8.0	9.8	12.5	17.0	19.1	20.0	0.17	21
22	calm	0.83		0.2	1.7	3.5	4.8	6.3	7.1	8.8	11.0	13.0	15.5	16.0	0.33	22
23	calm	0.83		0.2	1.6	3.5	4.8	6.5	7.5	8, 8	10.2	12.0	16.1	17.0	0.17	23
24	calm	0.83		0.2	1.5	3.6	4.9	6.8	7.9	9.7	11 3	13.6	18.1	19.0	0.17	24
25	calm	0.83	l	0.2	1.6	3.5	5.3	7.6	9.8	11,2	13.5	15.6	19.5	20.0	0.33	25 26
26	calm	1.00		0.2	1.7	4.0	5.9	8.4	10,6	13,4	16.5 19.0	19.3	29.1 25.1	30.0 26.0	0.17	27
27	calm	1.33		0.1	1.8	4.5	6.7	10.2	12.0	15.0	19.0	22,0	63.1	20.0	0.17	' ا

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

⁽²⁾ Calm denotes wind speed less than 0.5 m/sec.

			TABLE	T-6 1	DISTRIBI	ITION O	F SCAL	AR WIND	og.			SC	AT.AR W	IND DIS	TRIBUT	ON
STATI	ON:		IABLE		MONICA,					•		-	ALMA W	THE DES	T KIDO II	
	RENCE P	ERIOD:		MAY								57	NTA MO	ONICA, C	ALIFOR	AIM
STATI	ON ELEV	ATION:		125 feet	or 38.1	meters !	MSI.							МАЧ		
STATI	ON COOF	DINATE	S:	34.01 de	ng N. 116	4. 27 deg	w									
PERIO	D OF OF	SERVAT	ION:					1, 1956- 18, 1956			960					
DATA	SOURCE	: .			Weather eather B		• Center					N	O, OF OI	BS. FOR	EACH L	EVEL:
				Ashevill	e, North	Carolin	Space A	dıninistr	ation .		····			620 UNITS:		
PREP	ARED BY	;		Marshal Aerophy	I Space I	Flight Co Astroph	nter, As	roballist anch, Hu	tics Divi	aion Alabam	ıa.		m	oters/so		
Alt.	Min.	Pct.		7 (1) (14)			TIVE P	ERCENT	AGE FR	EQUENC	Υ			Max.	Pct.	Alt.
(MSL) km	Speed	Freq.	0.135	2. 28	15.9	50.0	68.0	84. J	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL) km
sfc	calm	9.03			0.4	2.4	3. 7	5.3	6.0	7, 2	8.6	9. 9	16.1	17.0	0.16	efc
1	calm	0.16		0.1	1.0	2.5	3.5	5.0	5.9	7, 3	8.5	9. 7	16.1	17.0	0.16	1
2	1.0	2.42			2.4	5.3	6.7	8.4	9.6	11, 2	12.5	13, 5	16.7	17.0	0.48	2
3	1.0	1.77		1.1	3.5	7.5	9.9	12.6	14, 3	16. 0	17.9	20, 6	22.7	23.0	0.65	3
4	1.0	1.61		1.2	4.3	9.2	22. 1	23.8	25. 4	37.1	38.0	0.16	4			
5	1.0	0.97		1.41	4.9	11.4	15.1	28, 2	31.6	33, 6	38.1	39.0	0.16	5		
6	1.0	0.65		2, 2	5.9	13.5	17.6	23.3	27. 2	32, 5	39.2	42. 4	45.1	46.0	0.16	6
7	2.0	1.13		2.7	8.0	15.5	20.2	26.6.	30.0	38. 0	44.6	49. 4	56.1	57.0	0.16	7
8	2.0	0.32		2.9	8.8	17.9	23.3	29.7	34.5	41, 3	46.4	52.8	66.5	67.0	0.32	В
9	2.0	0.65		3.5	10.6	20.5	26.0	32.4	37.4	45.0	50.4	53. 4	69.1	70.0	0.16	9
10	1.0	0.32		5.1	11.9	22.4	28.2	35.0	39.6	47.0	53.4	60,8	73.1	74.0	0.16	10
11	3.0	0.32		6.0	13.4	24.6	30.7	37.4	41.7	47. 7	56.4	62,8	75.1	76.0	0.16	11
12	4.,0	0.32		6.7	14.6	25.0	30.5	36.7	40, 3	48.6	54.9	60, 4	75.1	76.0	0.16	12
13	5.0	0.32		8.2	14.4	23.7	28.2	34.6	38, 4	44, 3	49.9	53.9	71.5	72.0	0.32	13
14	4,0	0.16		8.1	13.1	21.3	25.7	30.2	34.0	38.4	42.9	47, 9	60.1	61.0	0.16	.14
15	4.0	0.48		6.5	11.8	17.6	21.6	26.0	28,4	31.8	35.6	41,8	51.1	52.0	0.16	15
, 16	1.0	0.16		4.3	8.7	13.9	16.9	21.2	23.0	26, 4	30.2	34.4	41.5	42.0	0.32	16
17	caim	0.16		2.1	5.7	10.4	12.6	16.0	18, 0	21, 5	23.4	26.8	34.1	35.0	0.16	17
18	calm	0.32		0.6	2.8	6.5	8.7	11.4	13, 1	15.4	17.3	19.9	27.1	28.0	0.16	18
19	calm	0.16		0.6	2.0	4.1	5.7	7.7	8,8	10.8	13.2	15, 8	20.1	21.0	0.16	19
20	calm	0.16		0.3	1.6	3.3	4.4	6.0	7. 1	9.4	11.1	12. 2	16.1	17.0	0.16	20
21	calm	0.97		0. Z	1.5	3.3	4.5	5.9	7.0	7. 9	9.5	11.4	16.1	17.0	0.16	21
22	calm	0.48		0,2	1.5	3.6	4.8	6.2	6.9	7.9	9.9	12. 6	17.1	18.0	0.16	22
23	calm	0.48		0.2	1.7	3.9	5.6	7.0	7.8	9.4	11.3	14. 8	19.1	20.0	0.16	23
24	calm	0.65		0.2	1.5	4.1	5.9	7.6	8.6	10. 7	14.4	18.8	22.1	23.0	0.16	24
25	calm	0.48		0. Z	1.6	4.3	5.9	7.7	9, 0	10.8	15.1	17. 9	25.1	26.0	0.16	25
26	calm	0.65		0.2	1.7	4.4	6.4	8.0	9.2	11. 2	12.6	16.8	25.1	26.0	0.16	26
27	calm	0.48		0.2	1.8	4.7	6.6	8.6	9,8	11.4	12.7	15.8	22.5	23.0	0.32	27

NOTE: {1} When the percent frequency of minimum speed exceeded 2, 28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

⁽²⁾ Calm denotes wind speed less than 0.5 m/sec.

			TABLE	; 1-7	OISTRIB	UTION O	F SCAL	LR WIND	s			sc	ALAR W	IND DIS	TRIBUTI	ON
STATE	ON: CENCE P	ERIOD:		SANTA I	MONICA,	CALIF	ORNIA					57	NTA MC	DNICA, C	ALIFOR	NIA
STATI	ON ELEV	ATION:		125 feet	or 38.1	melers !	ASI.							JUNE	•	
STATI	ON COOR	DINATE	ıs:	34.01 de	g N. 11	8. 27 deg	w						<u>; </u>			
5									٦.							
PERIO	D OF OB	SERVAT	NON:	Long Bo Santa M	ach, Cul onica, C	ifornia alifornia	Jamiary April	1, 1956- 18, 1956-	April 17 Decemb	, 1956 er 31, E	960					
DATA	SOURCE	:		National U.S. W		r Record	Conter					NO	OF OF	S, FOR	EACH L	EVEL:
DATE	BED DY			Ashevill National	e. North	Carolin	Space A	dministr	ation					UNITS		
PKEPA	RED BY	:		Marshal Aerophy	I Space sics and	Flight Ce Astroph	nter, Ac	roballist	tice Divi	sion Alabam	ı a .	1.	me	sters/sec	ond	
Alt.	Min.	Pct.		Februar		62 CUMUL/	TIVE P	ERCENT	AGE FR	EQUENC	Y			Max.	Pct.	Alt.
(MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL) km
efc	calm	13.00			0.1	2.0	3.2	4.9	5.6	6.4	7.3	7,7	10.1	11.0	0.17	∎fc
ı	calm	0.33		0.1	1.0	2.5	3.5	4.8	5,8	6.8	8.6	9.8	12.1	13.0	0.17	1
2	1.0	6. 33			1.9	4.3	5.8	7.6	12.4	13.5	17.1	18.0	0.17	2		
3	calm	0.33		0.8	2.5	6.2	8.6	11.2	15.9	17. 3	20.1	21.0	0.17	- 3		
4	calm	0.17		0.5	3.1	7.4	10.3	13.7	18.7	20,0	21.7	22.0	0.50	1		
5	calm	0.33		0.8	3.0	8.2	11.5	15.1	17.2	19.9	21.5	23.0	35.1	36.0	0.17	5
6	1.0	1.83		1.1	3.9	9.0	12.9	17.1	19.6	22. 8	25.8	28.0	31.1	32.0	0.17	6
7	1.0	1.83		1.2	4.6	10.4	14.2	18.8	21.8	25.4	28.1	31.0	37.1	38.0	0.17	7
8	1.0	0.50		2.1	5.4	12.3	16.5	21.5	24.4	29.0	32.4	37.0	42.7	43.0	0.67	8
9	1.0	0.50		2.3	6.7	14.7	19.2	24.2	27.0	31,1	35.0	40.0	56.1	57,0	0.17	9
10	1.0	0.17		3.2	7.8	16.9	21.5	27.4	31.3	35.4	39.1	43.0	50. 1 57. I	51.0 58.0	0.17	10
11	1.0	0.83		3.1	9.5	19.3	24.6	31.1	34, 3	38.4 39.8	42.1 47.4	49.0 52.5	58.1	59.0	0.17	12
12	1.0	0.33		3.8	10.8	20.2	26.4	32.7	36. 2 35. 7	40.4	46.1	50.0	60.1	61.0	0.17	13
13	1.0	0.17		3.7	9.4	18.6	23.7	30.1	33,0	34.9	39.0	42.0	55.1	56.0	0.17	14
14 15	2.0 1.0	0.50		2.4	7.6	14.5	19.2	23.9	26.1	28.8	30.4	32,0	42.1	43.0	0.17	15
16	1.0	0.83		2.1	5.6	10.3	13.2	16.8	19.0	22.8	24.9	26.7	29.1	30.0	0.17	16
17	1.0	1.50		1.1	3.1	6.5	8.3	11.2	12.8	15, 3	17.5	19.6	27.1	28.0	0.17	17
18	1.0	3.83	1		2.0	4.0	5.5	7.6	8, 7	10,4	12.4	14.3	17.1	18.0	0.17	18
19	calm	0.17		0.5	1.9	4.0	5.4	6.9	8.2	9.5	10.7	12.0	16.1	17.0	0.17	19
20	1.0	1. 33	l	1.1	2.7	5.3	6.5	8.2	9.4	11,2	12.4	14.0	16.1	17.0	0.17	20
21	1.0	0.33		1.8	3.8	6.5	8.0	9.6	10.7	12.0	13.2	14.6	18.1	19.0	0.17	21
22	1.0	1.00	1	1.5	4.9	7.7	9.0	10.7	11,6	12,7	13.9	14.8	21.1	22.0	0.17	22
23	1.0	0.33	I	2.4	5.7	8.5	9.9	11.6	12,4	14.0	15.2	16.5	20.1	21.0	0.17	23
24	1.0	0.33	1	2.7	6.1	9.0	10.8	12.5	13.6	15.0	16.5	17.5	24.1	25.0	0.17	24
25	2.0	0.83		2.8	6.3	9.6	11.5	13.2	14.4	16.1	17.0	18.0	28.1	29.0	0.17	25
26	1.0	0.50		2.3	6.2	10.1	11.8	13.6	15.2	16,6	17.9	21.3	30.1	31.0	0.17	26
27	1.0	1.00		2.1	5.9	10.5	12.3	15.3	16.5	17.8	20.0	23.5	30.5	31.0	0.33	27

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

⁽²⁾ Calm denotes wind speed less than 0.5 m/sec.

			TABLE	I-8 I	STRIBU	O MOITI	F SCAL	R WIND	5			sc	ALAR W	IND DIST	RIBUTI	ON
STATE	ON: ENCE P	ERIOD:		SANTA P	MONICA,	CALIFO	ORNIA			· 		5.4	INTA MC	DNICA, C	ALIFOR	NIA
STATIO	ON ELEV	ATION:		125 feet	or 38.1	moters N	151.							JULY		
STATIO	ON COOF	DINATE	S:	34.01 de	g N, 118	27 deg	w									
PERIO	D OF OB	SERVAT	'ION:	Long Bo Santa Me	ach, Cali mica, Ca	fornia Hifornia	January April	1, 1956- 18, 1956-	April 17 Decemb	, 1956 er 31, 1	76 0					
DATA	SOURCE	:		National U. S. W	eather B	UFORIL						NC	O, OF OI	35, FOR 620	EACII L	EVEL.:
PREPA	RED BY	<u>':</u>		National	Aeronas	Carolinatics and	Space A	dministr roballist	ation			+-		UNITS:		
				Aerophy Februar	sics and	Astrophy	ysics Br	anch, Hu	nts ille,	Alabam	2		me	sters/sec	ond	
Alt. (MSL)	Min. Speed	Pct. Freq.				CUMULA		ERCENT			1			Max. Speed	Pct. Freq.	Alt. (MSL)
km			0.135	2.28	15.9	50.0	68.0	84,1	90.0	95.0	97.72	99.0	99.865 8.1	9.0	0.16	km sfc
sfc	calm	13.71	'		0.1	2.0	3.1	4.8	5.3	5. 8 5. 8	6.4 7.1	7. 1 8. 2	10.7	9.u 11.0	0.16	1
1	calm	0.81		0.0	0.7	2.0	2.8	4.1 6.7	4.7	~8, B	9.6	10.6	16.1	17.0	0, 16	2
2	1.0	5,81 0,48		0.3	1.6 2.4	3.8 5.3	5. 1 7. 3	9.4	7. 7 11. 0	12.9	14.2	15.9	18.1	19.0	0.16	3
3	calm calm	0.48		0.6	3.0	6.2	8.6	11.0	12.4	14. 0	15.9	17.4	21.1	22.0	0.16	
5	1.0	2.74		0.0	3.0	6.8	9.0	11.9	13,6	15. 2	16.7	17. 7	21.5	22.0	0.32	5
6	1.0	1.77		1.0	3.3	7.5	10.0	13. Z	14.9	17.3	18.9	22.4	27.5	28.0	0.32	6
7	1.0	1.77		1.1	3.6	8.6	11.7	15,1	17, 2	19.6	22.6	26. 2	30.1	31.0	0.16	7
8	1.0	1.94		1.1	3.8	10.1	13.0	17.0	19. 3	23.6	26.9	28. 9	33.1	34.0	0.16	8
9	1.0	0, 97		1.3	4.2	11.3	15.4	20.2	22, 4	26, 0	28.4	30. 6	40.1	41.0	0.16	9
10	1.0	0.81		1.4	5.4	12.8	17.5	23.1	26. 5	29. 1	31.6	33.9	38.1	19.0	0.16	10
11	1.0	0.97		1.7	6.7	14.8	19.7	26.2	29.0	32. 1	34.1	36.9	40.7	41.0	0.48	11
12	calm	0.16		2.1	7.2	15.6	20.9	28.0	30.5	32. 9	36.9	39. 4	50.1	51.0	0.16	12
13	1.0	0.32		2.0	6.4	15.1	20.9	27.1	29.5	31. 7	36.4	38, 2	40.1	41.0	0.16	13
14	1.0	0.65		1.8	5.5	13.0	17.7	23.8	25, 6	28.5	29.9	32, 4	35.1	36.0	0.16	14
15	1.0	0.97		2.0	4.7	9.7	13.0	17.1	18.8	21.5	23.6	25, 5	27.5	28.0	0.32	15
16	1.0	0.48		1.5	3.5	6.8	8.9	11.5	12.9	15, 3	17.2	18. 7	22.1	23.0	0.16	16
17	1.0	2, 26		1.0	2.9	5.3	6.5	8.2	9.0	10.5	11.8	12.8	20.1	21.0	0.16	17
18	calm	0.32		1,1	2.7	5,3	6.6	7.9	8.9	10.1	10.9	11.9	13.1	14.0	0.16	18
19	1.0	1.77		1.2	3.7	6.6	8.1	9.9	10, 8	11.6	12.5	13.5	15.1	16.0 19.0	0.16	20
20	1.0	0.32		1.8	5.4	8.2	9.7		12,0	12. B	13.8	15, 1 16, 8	18.1	20.0	0.16	21
21	1.0	0.48		3.0	7.0 8.2	9.9 11.2	11.3 12.4		13.3 14.9	14, 4 16, 0	16.8	16.8	21.1	22.0	0.16	22
22	1.0 2.0	0.16		6.0	9.4	12.5	13.6	1	15.8	17, 0	17.9	17. 7 18. B	22.1	23.0	0.16	23
23 24	2.0	0.32		6.1	10.9	13.5	14.9		17.2	18.0	18.9	19.9	21.5	22.0	0.32	24
25	2.0	0.32		6.7	11.2	14.2	15.9		18.4	19.5	20.7	21.8	25.1	26.0	0.16	25
26	2.0	0.16	ŀ	7.5	11.6	15.3	16.8	i	19.4	20.8	21.9	22. 8	25.7	26.0	0.48	26
27	2.0	0.16	•	8.8	12.4	16.1	17.5	ĺ	20.8	22.0	23.6	26. 6	28.1	29.0	0.16	27
<u> </u>	<u></u>		<u></u>	<u> </u>	<u> </u>			<u></u>			L		L		<u> </u>	ــــــــــــــــــــــــــــــــــــــ

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

⁽²⁾ Calm denotes wind speed less than 0.5 m/sec.

			TABLE	E I-9	DISTRIE	ution (OF SCAL	AR WIN	DS		•	S	CALAR V	VIND DIS	TRIBUT	ION
STATI REFE		PERIOD:		SANTA AUGUS		, CALIF	ORNIA					s	ANTA M	ONICA,	CALIFO	RNIA
		VATION:	:			meters	MSL					1		AUGUS	т	
STATI	ON COO	RDINATI	ES:	34.01.0	nc N. 11	H. 27 deg	. w									
,	· •			20,00	• g · · ·			•								
PERIC	D OF O	BSERVA'	rion:			liforma Zaliforni,					196 0					
DATA	SOURCE	: :		U. S.,V	eather l			г				N	O. OF 0	BS. FOR	EACH I	EVE1.:
PREP	ARED BY	7 :	·	Nationa Marsha Aerophy	l Aerona li Space /sic# and	h Carolii utics and Flight C I Astropi	i Space / enter, A	eroballis	tics Divi		na .		m	UNITS:		
Alt.	Min.	Pct.	I	Februa	y 23, 19	_	ATIVE P	ERCENT	TAGE FR	EQUEN	ΣY			Max	Pct.	Alt.
(MSL) km	Spead	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	25.0	97.72	99.0	99.865	Speed	Freq	(MSL) km
вſс	calm	16.77				2.0	2, 9	4.6	5, 2	5.9	6.6	7.3	8.5	9.0	0.32	∎ſc
1	calm	. 0.97		Q. 0	0.8	2.0	2.8	3.9	4.7	5.6	6.5	7, 4	8.5	9.0	0.32	1
2	1.0	6.29			1.6	3.5	4.5	5.9	7.0	8.1	10.1	11.1	12.5	13.0	0.32	2
3	1.0	2.90			2.5	5.1	6.5	8.2	9, 2	10,6	12.0	12,9	16.5	17.0	0.32	3
4	1.0	4.35			2.8	6.0	7.7	10.1	11,5	12.9	14.1	15,6	18.1	19.0	0.16	4
5	calm	0.48		0.5	2.5	6.1	8.0	11.4	13,1	14.8	16.1	16.9	18.7	19.0	0.65	5
6	calm	0.32		0.7	3.0	6.5	8.9	12.2	14,2	16.6	17.9	20.4	25.1	26.0	0.16	6
7	1.0	2.42		, ,	3.1	7.4	10.3	14.1	16.1	18.4	21.2	22.7	25.5	26.0	0.32	7
8	1.0	1.45		1.2	4.1	8.8 10.0	11,8	16.4	18,3	21.0	23.6	25, 8	27.1	28.0 32.0	0.16	8
10	1.0	1.13		2.0	6.4	12.2	16.8	22.8	26,0	28. 2	30.6	33.9	40.1	41.0	0.16	10
11	1.0	0.65		2.9	7.6	14.8	20.3	25.7	27.9	30,8	32.2	34, 4	41.1	42.0	0.16	111
12	1.0	ő. 16		3.5	8.6	16.9	22.1	27.8	30.5	33, 3	35.6	37. 9	43.1	44.0	0.16	12
13	1.0	0.16		3.5	8.6	16.6	21.5	26.9	29.4	32.3	34.9	37. 9	44.1	45.0	0.16	13
14	1.0	0.16		3.2	7.6	14.4	18.1	22.6	24.3	27.3	30.4	31.6	35.1	36.0	0.16	14
15	1.0	0.48		2.1	5.3	10.4	13.5	17.2	18.8	21.2	22.8	24.9	28.1	29.0	0.16	15
16	calm	0.32		1.0	3.1	7.0	9.0	11.6	13,1	15.6	18.5	20, 9	24.5	25.0	0.32	16
17	calm	0.16		0.6	2.0	4.3	5.8	.7.6	8, 6	10.3	12.7	14.9	19.1	20.0	0.16	17
18	1,0	3.39			2.0	4.1	5.3	6.8	7,6	8.7	9.9	10.9	16.1	17.0	0.16	18
. 19	calm	0.16		0.9	2.8	5.5	6.8	8.2	8.9	10.0	10.8	11.4	16.1	17.0	0.16	19
20	calm	0.16		1.3	3.9	7.2	8.5	10.1	10.8	11.8	12.7	13,7	16.1	17.0	0.16	20
21	1.0	0.16		2. 3	5.8	9.0	10.3	11.7	12,4	13.3	14.5	15.4	16.5	17.0	0.32	21
22	3.0	0.97		4.1	7.6	10.8	11.9	13.3	14, 2	15,3	16.3	17.4	20.1	21.0	0.16	22
23	3.0	0.48		6.0	8.8	12.0	13.3	14.9	15.6	16.6	17.9	18.9	27.1	28.0	0.16	23
24	5.0	0.32		6.4	10.1	13.2	14.6	16.0	16.7	17,9	18.9	20.5	26.5	27.0	0.32	24
25	4.0 6.0	0.16		7.2	11.0 11.4	14.1 14.9	15.6 16.4	17. 1 18. 0	17.8	18,9	20.6	21.6	27.1 29.1	28.0 30.0	0.16	25 26
26 27	5. O	0.32		7.3	11.4	15.6	17.0	19.0	19.1	20.5	22.9	23.8	30.1	31.0	0.16	27
																L

⁽²⁾ Calm denotes wind speed less than 0.5 m/sec.

												_				25
			TABLE	I-10 I	DISTRIB	O NOITU	F SCAL	AR WIND	5			sc	ALAR W	IND DIS	rributi	ON
STATI	ON: RENCE I	PERIOD:		SANTA I		CALIF	DRNIA					SA	NTA MO	ONICA, C	ALIFOR	NIA
STATI	ON ELE	VATION:		125 feet	or 38.1	meters	MSL						S	ЕРТЕМВ	ER	
STATI	ON COO	RDINATE	ES:	34.01 de	g N. 118	1. 27 deg	w			 						
DERIO	D OF O	SERVA'	rion:	l our Be	2 alv. (* .1	6	Laures	1 1056	April 17	1956	-	-				
LENIO									-Decemb		960					
DATA	SOURCE	:		U. S. W	eather P							NO	OF OF	SS. FOR	EACH L	EVEI.:
PREPA	ARED BY			National	Acronai	Carolin	Space A	dministr	ation					UNITS:		
, KEI,				Marshal Aerophy	I Space !	Flight Co Astroph	nter. Ac	roballis	tics Divi	aion Alabam	a		m	eters/sec	ond	
Alt.	Min.	Pct.					TIVE P	ERCENT	AGE FR	EQUENC	Y			Max. Speed	Pet. Freq.	Alt. (MSL)
(MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	.speed	ried.	km
sfc	calm	21.67				1.7	2.8	4.3	4.9	5, 6	6.0	7. 4	8.7	9.0	0.50	efc
1	calm	0.33		0.1	0.9	2.2	3. 1	4.2	5, 6	6.3	7. 1	8.1	9.0	0.17	,	
2	1.0	4.17			2.0	4.4	5.7	7.4	9.7	11.3	12, 2	15.1	16.0 23.0	0.17	2	
3	1.0	1.50		1.1	3.3	6.3	8.2	10.5	13, 5 16, 5	15.0 19.1	16, 5 23, 0	22.1	26.0	0.17	,	
4	1.0	1.67		1.1	3.4	7.1 7.6	9.3	12.2	20.8	22, 5	32.1	33.0	0.17	5		
5 6	1.0	0.83		1.0	4.6	9.0	12.1	15.5	15. 6 18. 2	18. 0 21. 7	24.4	27. 0	35.1	36.0	0.17	6
7	calm	0.17		2.1	5.4	11.2	13.9	17.8	21.4	24.7	29.4	33, 0	41.1	42.0	0.17	7
8	1.0	0.67		3.0	7.0	12.6	15.8	21.5	25, 4	30. 2	34.0	38. 5	47.1	48.0	0.17	8
9	1.0	0.50		2.8	7.5	14.1	18.4	25.6	29.5	33.8	38.3	41.3	44.1	45.0	0.17	9
10	1.0	0.17		3.0	8.3	16.6	21.6	28.6	32.0	36, 5	41.0	45.0	55.1	56.0	0.17	10
11	1.0	0.33		3.0	9.4	18.8	24.7	32.4	35, 6	40.0	43.3	47.0	63.1	64.0	0.17	11
12	1.0	0.17		4.0	10.1	21.0	26.3	34.6	37.4	40.6	45.4	47, 6	56.1	57.0	0.17	12
13	1.0	. 0, 17		4.5	[10.3	21.8	27.2	32.9	36. 0	40.8	45.3	49.0	51'. 1	52.0	0.17	13
114	1.0	0.50		3.3	9.7	19.6	23.7	28.9	31. 2	35.0	40.7	45, 0	48.5	49.0	0.33	15
15	1.0	0.17		2,4	7.6	15.6	19.6	23.5 17.2	25, 8 19, 3	28.8	33.1 26.0	36, 2 29, 5	47.1 31.7	48.0 32.0	0.17	16
16	1.0	0.67		1.9	5.0 2.9	10.7 6.2	13.8 8.4	11.2	12.9	16.0	18.6	21.0	25.1	26.0	0.17	17
18	1.0	6.17		•	1.8	3.8	5.2	7.3	8.7	11.0	12.7	14, 6	21.1	22.0	0.17	18
19	calm	0.33		0.2	1.5	3, 3	4.5	6.0	6.8	8, 0	9.6	11.4	16.1	17.0	0.17	19
20	calm	0.50		0.2	1,5	3.4	4.7	6.3	7. 1	8, 0	9.0	10. 4	18.1	19.0	0.17	20
. 21	calm	0.33		0.3	1.9	4.1	5.6	7.0	7, 8	8.9	10.3	11. 2	13.5	14.0	0.33	21
22	calm	0.33		0.5	2.4	5.2	6.7	8.0-	9, 1	9. 9	10.8	11.7	13.5	14:0	0.33	22
23	calm	0.50		0.7	2.7	6.0	7.5	9.3	10, 4	11, 3	12.2	13.4	18.1	19.0	0.17	23
24	calm	0.33		0.8	3.2	6.8	8.3	10.2	11.2	12. 2	13.9	15.6	22.5	23.0	0.33	24
25	calm	0.17		1.0	3.3	7.1	8.8	10.9	11.8	13.1	15.2	16.4	20.1 18.5	21.0 19.0	0.17	25
26	calm	0.17		0.9	3. 2 3. 2	7.3	9.1 9.4	11.3	12, 5 12, 5	13.8 15.1	15.9 16.6	17. 0 17. 6	20.1	21.0	0.33	l
27	calm	0.17	<u> </u>	U. Y	3.6	1.5	7.4		,]			<u> </u>		

⁽²⁾ Calm denotes wind speed less than 0.5 m/sec.

			TABLE	1-11) ISTRIBU	O NOITE	F SCALA	R WIND	S			şc	ALAR W	IND DIST	RIBUTI	ON
TATI				SANTA)		CALIFO	ORNIA					54	NTA MC	ONICA, C	ALIFOR	NIA
	ON ELEV			OCTOBE	or 38.1	meters h	151.		-	,,		1		остови	:R	
														OCTOBE		
TATI	ON COOF	DINATE	S:	34.01 de	g N, 118	. 27 deg	w									
PERIO	D OF OB	SERVAT	NON:	Long Bo	ach, Cali	ifornia alifornia	January April	1, 1956- 18, 1956-	April 17 Decemb	, 1956 er 31, 1	760	-				- 7
ATA	SOURCE	t .		National	Weather eather B	Record			<u> </u>			NO	OF OF	3S. FOR 620	EACH L	EVE
				Ashevill	e. North	Carolina	Space A	dministr	ation			+-		UNITS:		_
PREPA	ARED BY	:		Marchal	I Space I	Flight Co Astroph	nter, Ae	roballist	ica Divi	sion Alabam	•		m	eters/sec	:ond	
Alt.	Min.	Pct.					TIVE P	ERCENT	AGE FR	EQUENC	Y			Max. Speed	Pct. Freq.	A1 (M:
MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	68.0	84. i	90.0	95.0	97.72	99.0	99.865			kı
síc	calm	16.29				1.8	2.7	4.2	4.7	5, 4	5.9	7. 4	10.1	11.0	0.16	
1	calm	Q.48		0.1	0.9	2.5	3.5	5.0	5, 9	7. 5	9.8	11.9	21.1	22.0	0.16	
2	1.0	5. 65			1.7	4.3	5.8	7.8	9.0	10.4	11.9	13. 2	17.1	18.0	0.16	
3	1.0	1.77		1.0	2.8	5.9	8.1	11.2	12. 6	14.7 18.6	17.3	18.8	27.1	28.0	0.16	
4	1.0	1.94		1.0	3.5	7.6	10.3	13.5	21.4	24. 2	29.1	30.0	0.16	i		
5	1.0	0.97		1.3	4.0	9.2	12.0	16.3	18, 6	22.7	26.9	31.8	46.1	47.0	0.16	1
6	calm	0.16		1.4	4.5	1,0.4	13.9	19.0	21.9	27.0	31.9	41,6	49.1 52.1	50.0 53.0	0.16	1
7	1.0	0.81		1.6	5.6	11.7	15.1	21.6	26.4	30.5	37.7 39.9	41, Z 46, 8	64.1	65.0	0.16	1
8	1.0	0.65		2.3	6.8	13.6	17.6	24.6	28.8 32.1	34. 0 37. 6	42.9	50.8	62.1	63.0	0.16	
9	1.0	0.32		3.1	8. l 8. 9	15.1 17.0	19.9 22.1	29.6	34.6	40.2	45.4	47. 9	58.1	59.0	0.16	1
10	1.0	0.16		3.5 4.0	9.4	18.2	23.6	29.9	34.7	39.7	44.8	50, 8	55.1	56.0	0.16	
11	1.0	0.32		3.8	10.2	19.1	24.0	30.2	33, 2	38. 2	42.9	47, 2	54. 1	55.0	0.16	
12 13	1.0	0.48		4.6	10.7	19.0	23.1	28.0	31. 1	36. 0	38.4	40. 2	45.1	46.0	0.16	
14	2.0	0.16		4.7	9.7	17.6	21.1	25.7	28, 2	30.9	34.4	37. 4	44.1	45.0	0.16	
15	2,0	0.65		4.3	8.8	15.5	18.6	22.0	24. 2	27, 0	29.1	30.9	33.1	34.0	0.16	
16	2.0	0.81		3.1	7.2	12.5	15.5	18.7	20. 3	22.5	24.8	28. 2	34.1	35.0	0.16	-
17	1.0	0.65	1	2.1	4.8	9.3	11.7	14.5	16.0	18, 3	20.6	22.9	32.1	33.0	0,716	-
18	1.0	1.61		1.1	3.2	6.5	8.3	10.5	11.8	13. 8	15.8	17. 9	23.1	-24.0	0, 16	
19	calm	0.16		0.8	2.3	4.6	6.1	7.7	8.7	10.5	13.5	16, 4	18.1	19.0	0.16	
20	1.0	5.32			1.7	3.7	5.0	6.9	8, 1	9.5	11.2	13, 8	17.1	18.0	0.16	
21	calm	0.48	1	0.2	1.4	3.3	4.6	6.3	7,4	8,8	10.8	12. 3	15.1	16.0	0.16	
22	calm	1.13	l	0.1	1.4	3.4	4.7	6.4	7.3	8, 6	9.9	11, 1	15.1	16.0	0.16	1
23	calm	0.65		0.2	1.5	3.6	4.8	6.5	7, 3	8.7	10.0	10.9	12.5	13.0	0.32	
24	calm	0.32		0.2	1.6	3.9	5.5	6.9	7.9	9, 5	11.3	12. 7	22.1	23.0	0.16	1
25	calm	0.32	l	0.3	1.8	4.2	5.9	7.7	8,8	10.9	12.4	14.9	18.1	19.0	0.16	1
26	calm	0.48		0.3	1.9	4.6	6.6	9.2	10.6	12.8	14.9	16.9	19.1	20.0	0.16	
27	calm	0.32	ı	0.4	2.2	5.5	7.8	10.8	12.5	15.4	18.4	20.5	25.1	26.0	0.16	i I

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

⁽²⁾ Calm denotes wind speed less than 0.5 m/sec.

				<u> </u>								_				27		
	-		TABLE	I-12	DISTRIB	O MOLTU	F SCAL	AR WINE	S			sc	CALAR W	IND DIS	TRIBUTI	ON		
STATIO	ON: RENCE F	ERIOD:		SANTA NOVEM		, CALIF	ORNIA					S/	NTA MO	ONICA, C	ALIFOR	INIA		
·	ON ELE			125 feet		meters !	MSL						· N	OVEMBI	ER			
STATI	ON COO	DINATE	. q.	34 01 de	g N, 111	27 dag	w		-									
JIMI	o., 000.													•,				
PERIO	D OF OF	SERVAT	rion:	Long Be	aclı, Cal onica, C	ifornia alifornia	January April	1, 1956 18, 1956	-April 17 -Decemb	', 1956 er 31, 1	96 0							
DATA	SOURCE	:			Weather eather E		s Center			,		NO	NO. OF OBS. FOR EACH LEVEL:					
PREPA	ARED BY	,	·	Ashevill	e. North	Carolin		dministr	ation					UNITS:				
, KLI	Marahali Space Flight Center, Aeroballistics Division Aerophysics and Astrophysics Branch, Huntsville, Alabama February 23, 1962													nters/sec	ond			
Alt.	Alt. Min. Pet. CUMULATIVE PERCENTAGE FREQUENCY														Pet.	Alt.		
(MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	99.0	99.865	Spead	Freq.	(MSL) km							
sfc	calm	15.50			0.0	2.1	2.9	3.9	4, 6	5,5	6.7	9,6	21.1	22.0	0.17	s fc		
. 1	calm	0.67		0.1	1.0	2.6	3.8	5.7	7.0	9.4	11.6	14. 2	16.1	17.0	0.17	1		
Z	calm	0.17		0.3	1.8	4.3	5.9	8.6	10,3	12.7	15.6	18,0	22.1	23.0	0.17	2		
3	1.0	2.83			3.2	6.4	9.1	12.6	14.3	17.4	19.4	23,0	30.1	31.0	0.17	3		
. 4	calm	0.17		0.9	3.4	7.9	11.7	16.1	18,8	22, 1	25.4	29.0	37.1	38.0	0.17	4		
5	1.0	1.00		1.3	4.3	9.9	13.9	19.3	22.7	26. 3	30.8	35, 6	43.5	44.0	0.33	5		
6	1.0	1.33		1.4	5.0	12.0	16.4	22.2	26.5	31.0	35.0	41.0	67.1	68.0	0.17	6		
7	1.0	0.17	1	1.9 2.2	6.9	13.4 15.5	18.3 21.2	27.0 30.1	31.0 34.3	35.9 39.8	41.7	47. 5 50. 0	56.5 68.1	57.0 69.0	0.33	8		
8	1.0	0.33		2.8	7.6	18.1	23.8	33.2	38.3	44.0	47.9	51.0	64.1	65.0	0.17	9		
10	calm	0.17		2.7	9.0	20.5	27.5	35.7	40.0	46, 6	50.3	55.0	63.1	-64.0	0.17	10		
11	1.0	0.33		3.4	9.7	21.9	29.6	37.2	40,6	46.7	52.3	56, 3	66.1	67.0	0.17	11		
12	1.0	0.33		3.5	10.3	21.8	28.9	36.2	41,0	44,6	49.8	55,0	67.1	68.0	0.17	12		
13	1.0	0.33		2.7	10.3	21.2	28.0	33.9	37,5	42.5	46.4	49. 6	6Ż. 1	63.0	0.17	13		
14	1.0	0.17		2.6	9.2	19.6	25, 1	31.9	34, 8	38,5	42.3	46.0	56.1	57.0	0.17	- 14		
15	1.0	0.17		2.4	8.9	18.1	22.0	27.2	30, 3	32.8	37.8	40, 5	50.1	51.0	0.17	15		
16	1.0	0.50		2.2	7.3	15.6	18.8	23.0	25, 3	28,5	31.2	33, 6	38.1	39.0	0.17	16		
17	2.0	1.67		2.3	5.9	12.2	15.5	19.0	21.0	23,5	25.6	28.0	40.1	. 41.0	0.17	. 17		
18	1.0	0.83		1.4	4.8	9.4	11.8	15.7	17.5	19.6	22.5	27.0	30.5	31.0	0.33	18		
19	1.0	1.00		1.2	3.5	7.5	9.4	12.4	14,1	16,8	19.3	24, O	31.1	32.0	0.17	19		
20	calm	0.17		1.0	3.0	6.3	8.0	10.9	12.6	14.8	18.0	19.8	23.5	24.0	0.33	20		
21	1.0	2.50			2.4	5.8	7.7	10.0	11.7	13.7	16.0	17.7	20.1	21.0	0.17	21		
22	calm	0.17		0.8	2.4	5. B	7.5	10.1	11.5	13.5	15.9	17.0	20.1	21.0	0.17	22		
23	1.0	3.33			2.6	6.0 6.4	8.0	10.9	12,4	15, 3	18.3	21, 3	23.5 26.7	24.0 27.0	0.33	23		
24	calm calm	0.17		0.B 0.9	2.8 3.1	7.3	8.7 9.9	12.1 13.5	13,9	17.5	20.7	23, 6	33.1	27.0 34.0	0.50	25		
26	calm	0.17		1.3	3.6	8.6	11.9	15.8	16.3	19.6	26.1	25, 8 29, 0	34.1	35.0	0.17	26		
27	calm	0.17		1.3	4.3	10.1	13.6	18.6	20.9	26.4	29.2	32.0	35.1	36.0	0.17	27		
											<u> </u>			L	ــــــــــــــــــــــــــــــــــــــ	<u> </u>		

⁽²⁾ Calm denotes wind speed less than 0:5 m/sec.

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			TABLE	I-13 I	DISTRIB	O MOLTU	F SCAL	AR WIND	5			sc	ALAR W	IND DIST	RIBUTI	ом
STATIO	ON: LENCE P	ERIOD:		SANTA !		CALIF	ORNIA					SA	NTA MO	NICA, C	ALIFOR	NIA
	ON ELEV			125 feet	or 38.1	meters l	45L							ресемв	ER	
07 A 75	N COOF	DINATE	ė.	34 01 de	a N 11	3.27 deg	w									
SIXIN	JN 0001	(DINATE														
PERIO	D OF OB	SERVAT	'ION:	Long Be Santa Me	ach, Cal onica, C	ifornia alifornia	January April	1, 1956- 18, 1956	April 17 -Decemb	, 1956 er 31, 1	960					
DATA	SOURCE	:		National U.S.W		r Record	• Center	,				NO	O. OF OI	S, FOR	EACH L	EVEL:
DDEDA	Asheville, North Carolina REPARED BY: National Aeronautics and Space Administration Marshall Space Flight Center, Aeroballistics Division													UNITS:		
		•		Aerophy	sics and		m	sters/sec	ond							
Alt.	Min.	Pct.		Februar		CUMULA	TIVE P	ERCENT	ACE FR	EQUENC	Y			Max. Speed	Pet. Freq.	Alt. (MSL)
(MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	68.0	99.0	99.865	Speed		km				
sfc	0.0	11.61			0.4	2.2	2.8	3.7	4.3	5.5	6.9	8.5	14.5	15.0	0.32	síc
1	0.0	0.16		0.2	1.3	2.9	4.4	6.7	8.4	10.2	11.9	14.2	19.1	20.0	0.16	1
2	1.0	5. 16			2.1	5.0	6.9	9.4	11.2	13.2	16.9	22.6	28.1 28.7	29.0 29.0	0.16 0.48	2
3	1.0	1.77		1.0	3. 2	6.8	9.4	13.5	15.8	19.0	23.1	24.9 32.8	49.1	50.0	0.16	4
4	1.0	1.29		1.2	4.0	8.7	11.8	16.6	19.4 22.3	23.2	31.9	40.8	59.1	60.0	0.16	5
5	1.0	0.32		2.0	4.7 5.7	10.5 12.1	13.6 15.8	19.6 22.4	26.2	32.3	38.6	47.9	66.1	67.0	0.16	6
6	1.0	0.65		1.9	6.3	14.2	18.3	25.6	31.0	36. 3	46.2	50.8	80.1	81.0	0.16	7
7 8	1.0	0.16	:	1.8	6.7	16.1	21.8	30.1	34.3	44.0	50.9	54.9	84.1	85.0	0.16	8
9	1.0	0,16		2.7	8. Z	18.2	24.6	33.5	38.0	47.0	54.4	57.9	74. 1	75.Q	0.16	9
10	2.0	0.81		3.2	10.0	21.0	28.1	36.8	41.8	47.8	55.6	65.8	77.1	78.0	0.16	10
11	1.0	Q. 3Z		3.2	11.1	23.1	30.4	38.6	44.0	51.6	59.6	69.8	76.1	77. 0	0.16	11
12	2.0	Ó. 81		4.1	11.5	23.4	29.3	36.2	41.3	49.5	57.9	62.9	87.1	88.0	0.16	12
13	2.0	0.81		3.7	11.5	21.6	26.4	34.2	38.2	45.6	51.2	57.9	65.1	66.0	0.16	13
14	2.0	0.48		4.1	10.7	20.1	24.8	31,0	34.6	38.5	43,2	45.9	51.1	52.0	0.16	14
15	1.0	0.16		3.7	9.9	18.0	22.1	26.9	29.3	34.0	36.8	39.9	44.1	45.0	0.16	15
16	1.0	.0.16		3.0	8.6	15.7	18.9	23.2	26.3	29.8	32.9	35.4	39.1	40.0	0.16	16
17	1.0	0, 16		Z.0	6.4	12.5	15.6	19. 2	21.4	24.5	27.9	30.9	38.1	39.0	0.16	17
18	0.0	0.32		1.5	5.3	9.6	12.3	15.5	17.5	21.0	23.5	27.9	32.1	33.0	0.16	18
19	0.0	0.48		0.9	3.6	7.5	9.5	12.4	14.6	17.2	19.4	21.4	32.1	33.0	0.16	19 20
20	0.0	0.16		0.7	2.5	5.6	7.6	10.5	11.9	14.0	15.6	17.2	21.1 19.1	22.0 20.0	0.16	21
21	0.0	0, 16	•	0.8	2.3	5.1	6.9	9.7	11.4	12.8 13.0	15,4 14.8	17.4 17.2	20.1	20.0	0.16	22
22	0.0	0.16	ı	0.6	2.3	5.2 5.6	7.1	1	11.1	13.0	16.2	18.4	23.1	24.0	0.16	23
23	0.0	0.32 0.32		0.8	2.6	6.2	7.8	10.8	12.1	14.3	16.4	19.2	25.1	26.0	0.16	24
24 25	0.0	0.32		1.0	2.8	6.8	9.1	11.7	13.2	15.0	16.7	18.8	29.1	30.0	0.16	25
26	0.0	0.48		1.0	3.6	7.8	10.4	13.2	15.1	17.2	19.8	21.9	30.1	31.0	0.16	26
27	1.0	1.29		1.4	4.4	8.6	11.4	15.2	16.7	18.7	21.8	23. 9	30.1	31.0	0.16	27
ï					<u> </u>		<u> </u>	<u> </u>			<u> </u>		<u></u>	<u> </u>	<u> </u>	<u> </u>

⁽²⁾ Calm denotes wind speed less than 0.5 m/sec.

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(Positive for wind component from the west) (Negative for wind component from the east) Unit: meters per second Table II-1 Annual 30 Table II-2 January 31 Table II-3 February..... 32 Table II-4 March 33 Table II-7 June 36 Table II-8 July 37 Table II-9 August..... 38 Table II-10 September..... 39 Table II-12 November 41 Table II-13 December 42

TABLE II

Distribution of Zonal Winds

30																			
,			TABL	E 11-1	DISTRI	BUTION	OF ZON	AL WINI	os				ZONAL WIND DISTRIBUTION						
STATI		DEVICE				CALIF	'ORNIA					S	ΛΝΤΛ Μ	ONICA, (CALIFO	RNIA			
		PERIOD: VATION:		ANNUA		melers	MSL.												
.,,,,,,,				,,									ANNUAL						
STATI	ON COO	RDINATI	ES:	34.01 d	eg N. II	F 27 deg	W												
PERIO	D OF O	ASERVA	TION:					1, 1956 18, 1956			1960		Positive for components from west Negative for components from east						
DATA	SOURCE	:		U.S. W	eather l			<u> </u>				N	O, OF O	DS. FOR 7308	EACH I	EVEL:			
PREP	ARED BY	Y:		Nationa	Aerona	n Carolin uties and	Space A	dininist	ation					UNITS					
				Aerophy	sics and	LAstroph	onter, A sysics Bi	eroballis ranch, H	tics Divi antsville	ston , Alaban	14		m	eters/sec	cond				
Alt.	Alt. Ext. Pct. CUMULATIVE PERCENTAGE FREQUENCY													Ext.	Pct.	Alt.			
(MSL)	Speed	Froq	0 135	2.26	2.28 15.9 50.0 6v.0 R4.1 90.0 95.0 97.72									Speed	Freq.	(MSL) kin			
efc	- 7.0	0.04	- 5.1	- 3,8	- 1.4	- 0,2	1,0	2, 8	3.7	4.7	5,6	6,6	10.0	16.0	0.01	•fc			
1	-18.0	0.01	-11.7	- 6.7	- 2.4	- 0, 4	,0,4	1,8	2.7	4.0	5,6	7.6	12, 2	21.0	0.01	1			
2	-19.0	0.01	-12, 2	- 7,4	- 2.1	0,4	2.5	5. D	6.4	8,4	10.4	12,0	17,5	23,0	0,01	2			
3	-21,0	0.01	-14,1	- 8,4	- 3,7	1.9	4.8	8,5	10.5	13,2	15.8	18.2	23, 3	34,0	0,01	3			
4	-30.0	0.01	-18.9	- 8.3	- 2,6	3, 4	6.9	11.5	14.2	17.5	20.8	23.7	30,7	46,0	0.01	4			
5	-22,0	0.01	-17.6	- 8.2	- 1,5	4.8	8.8	14.0	17.0	21.4	25.7	29.9	39.7	47.0	0.03	5			
6	-24.0	0.01	-17, 4	- 9.8	- 0.9	6,3	11.0	16.6	20,2	25,2	30, 1	35,5	49.0	58.0	0,03	6			
7	-35.0	0,01	-20.9	- 9.3	- 0,7	8.0	12.9	19.2	23.2	28.9	35.1	41.8	59.0	70,0	0,01	7			
8	-34.0	0.01	-21.7	-10, 9	- 0,3	9.7	15.1	22, 1	26.7	32.8	39. 2	48.3	63.5	80.0 /	0,01	8			
9	-28.0	0,01	-22, 4	-10,8	0, 2	11.6	17.5	25, 2	29.8	36.8	43.9	52.2	65.0	86,0	0,01	9			
10	-31.0	0,01	-24, 2	-10.3	1,3	13.9	20. 2	28,5	33.2	40.4	48, 1	55.4	70.7	85,0	0,01	10			
11	-31.0	0,01	-24, 8	- 9.3	2.7	16, 2	22, 8	31.2	36.2	43,4	53.1	60.7	75, 1	87.0	0,01	11			
12	-31.0	0,01	-22.1	- 7.0	4, 5	18.0	24. 2	32.2	36.8	44, 1	53, 3	60.4	75,0	86,0	0,01	12			
13	-31.C	0,01	-22.9	- 5, 4	5, 7	18, 2	23.9	31,1	35.3	41,6	48, 5	54.7	69.1	80,0	0,01	13			
14	-24.0	0,01	-20,9	- 4.7	5.6	16,8	22,0	28, 3	32,0	36.9	43, 1	49.D	60, Q	69.0	0.01	14			
15	-22,0	0,03	-14.8	- 4.9	4. 4	14, 3	18,8	24, 4	27.5	31,8	36.9	41.8	51.6	63,0	0.01	15			
16	-19.0	0.01	-11.4	- 4, 2	2, 2	11,1	15.6	20,5	23.2	27.2	30.8	35,6	44, 5	51,0	0.01	16			
17	-19.0	0,01	-11,5	- 5, ì	- 0,5	7.6	11.8	16,5	18.8	22.2	26,5	30.1	37, 4	42.0	0,01	17			
18	-15.0	0.03	-12.4	- 7.3	- 2,3	4, 2	8.1	12,1	14,6	18.0	21.6	25.1	30, 3	39.0	0.01	18			
19	-16.0	0,03	-14.9	i	- 4,1	1,4	4.8	8, 5	10,7	14.1	17.1	20.4	26, 8	35.0	0,01	19			
20	-18.0	0.03	-15.1		- 6,3	- 0, 4	2. 3	6.0	8.0	10.9	14.4	17,8	26,0	32,0	0,03	20			
21	-21.0	0.01	-17.4		- 8.7	- 1,5	0.7	4, 4	6,5	9.5	12, 5	16. 3	24.7	30.0	0.04	21			
22	-28.0	0.01	-21.9	ŀ	- 9.3	- 2.6	-0.0	3.4	5,6	8,6	11.9	15.9	25,0	31,0	0.01	22			
23	-29.0	0.01	-22, 4		-10.0	- 3,8	-0.2	3, 5	5.7	8.7	12, 2	17,4	25, 1	31.0	0, 01	23			
24	430.0	0,01	-22, 2		-12, 9	- 3, 5	-0,3	4, 0	6.3	9.7	13,8	18.9	25, 5	31.0	0.01	24			
25	-31.0	0.01	1	-18.7	-12, 2	- 3.4	-0.1	4. 9	7.6	11,3	15,9	20, 3	28, 2	34,0	0,03	25			
26	-32.0	0.01	-26, 3		-13.5	- 3, 4	0, 2	6,1	9.6	14, 1	18.7	23,4	32,0	41.0	0,01	26			
27	-33,0	0.01	1	-20, 1	-14.6	- 3, 5	1.0	7, 8	11.6	16.3	21.9	26.9	34, 3	50.0	0,01	27			
~ '		5.5.		, .		- 3, 5		., 4				~~. /	77	30,0					

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.26 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

	-1		TABL	E II-2	DISTRIE	UTION C	OF ZONA	L WINDS	5			z	ZONAL WIND DISTRIBUTION							
TATIO	ON:			SANTA	MONICA,	CALIF	ORNIA						NTA MO	INITA C	ALTEOR	NTA				
REFER	ENCE P	ERIOD:		JANUAF	LY_							5/	IN IA MC	MICA, C	ALIFOR	INIA				
STATIO	ON ELEV	ATION:		125 feet	or 38.1	meters N	ASL .					JANUARY								
STATIO	ÓN COOF	DINATE	S:	34.01 de	g N, 118	27 deg	w			-										
PERIO	D OF OF	SERVAT	ION:	Long Be	ach, Culi	fornia	January	1, 1956-	April 17	1956	;		Positive for components from west Negative for components from east							
	,,			Santa M	onica, C.	alifornia	April 1	8, 1956-	Decemb	er 31, 19	960). OF OF							
DATA	SOURCE	:	•	U. S. W	Weather Cather B	ureau), OF 01	620	I.MGII E										
PREPARED BY: National Aeronautics and Space Administration Marshall Space Flight Center, Aeroballistics Division												7		UNITS						
				Aerophy	II Space 1 raics and ry 23, 19	Astrophy	nter, Ae	nch, liu	ntsville,	Alabam	.a		me	ters/sec	ond					
Alt.	Ext.	Pct. Freq.		Ţ <u>.</u>			TIVE P		T				T	Ext. Speed	Pct. Freq.	(MS				
MSL) km	Speed		0.135	2.28 15.9 50.0 68.0 84.1 90.0 95.0 97.72								99.0	99.865 9.1	10.0	0,16	sfc				
sfc	- 7.0	0.32		- 3,0	- 2.8	- 0.6	- 0.2	1,1	1.9	3.1	3.9	4.7	· ·	15.0	0.16	1				
1	-18.0	0.16		7,1	- 3.4	- 0.4	0.5	2.0	2.9	4.6	6.9	10.9	20.1	21.0	0.16	2				
2	-12.0	0, 32		7.8	- 2.6	1,4	4.3	6.8	8.3	10.6	12.4	14.2	25.5	26.0	0.32	3				
3	-21,0	0, 16	l	- 7.0	- 0. Z	5. 5 8. 0	8.5 11.9	11.9	14.2 19.6	22.8	25.4	28.4	30.5	31.0	0, 32	4				
4	-23, û	0.16		- 7.0 - 5.0	2.9	10.7	15.0	21.0	23.5	28.0	32.1	34.9	39.1	40.0	0.16	5				
6	-20.0	4,16		- 5, 2	4.0	13.1	17.9	24, 3	27.5	32.3	34.7	38.8	57.1	58.0	0.16	6				
7	-24.0	0.16		- 5.0	5.6	15.2	20.3	26.8	30.7	36.0	41.8	49,8	69.1	70.0	0.16	7				
8	-28.0	0.16		- 7.3	6.6	17.5	23, 7	30, 4	34.8	41.5	49.9	57,4	67.1	68.0	0.16	8				
9	-27.0	0.16		- 6.6	7.6	19.8	25.9	34. 4	39.5	46.5	54.7	58.9	66.1	67.0	0.16	9				
10	-25.0	0.16		- 4.5	9.8	22. 2	28.4	37.9	44.7	51.7	56.6	60,9	65.1	66.0	0.16	10				
11	-14.0	0.16		- 0.9	11.1	24. 1	30.7	41.0	48.0	57.0	61.1	64.9	71.1	72.0	0.16	11				
12	-17.0	0.16		2.3	13.1	24. 8	31.5	43.0	48.7	56,2	62.4	65.7	72.1	73.0	0.16	12				
13	-14.0	0.32	1	2, 5	13,3	24. 2	30.4	39,8	46.0	52.6	56.9	63.8	79.1	80.0	0.16	13				
14	- 1.0	0,16		4.3.	12.5	23.1	27.5	35.4	41.5	45,6	52.1	56.9	64.1	65.0	0.16	14				
15	- 7.0	0.16		2.0	11.7	19.5	24. 2	30,3	34,0	39.2	43.9	47,6	52.1	53.0	0.16	15				
16	- 7.0	0.16		2.1	9.8	16.8	20.3	24.6	26.8	30.4	37.4	40.8 34.4	48. 1 39. 5	49.0 40.0	0, 16	16				
17	- 5.0	0.32		- 0.1 - 3.0	6. 3 3. 1	9.6	16.7	20.0 15.9	21.9	27.0	26.1	27,7	34.1	35.0	0.16	18				
18	- 6.0 -11.0	0.81 0.16		7.0	- 0.2	5.5	9.0	12.8	14.8	17.7	20.9	24.8	29, 1	30.0	0.16	19				
20	-16.0	0.32	1	-12.5	2.1	2, 8	6.7	9.8	11.8	15.2	18.4	21.2	26.1	27.0	0.16	20				
21	-21,0	0.16	1	-14.0	- 4.1	1, 2	5.7	9.8	11.5	14.2	18.6	21.2	27.1	28.0	0, 16	21				
22	-28.0	0.16		-19.4	- 6, 4	0.5	5. 1	9. 2	11,5	14.5	19.9	22.9	30.1	31,0	0,16	22				
23	-29.0	0.16	l	-20, 4	- 8,8	- 0.1	5,0	9,1	10.9	14.0	19.8	25,2	30. 1	31.0	0,16	23				
24	-30.0	0.16		-20.7	- 9.2	- 0.1	5.1	10.4	12.8	17.0	20.4	24,8	30.1	31.0	0.16	24				
25	-31.0	0.16		-21.7	-11.7	- 0.3	6.3	13.0	15.6	19.7	24.6	27.9	33.5	34.0	0, 32	25				
26	-32,0	0.16		-22.5	-11,2	- 0, 2	7, 7	15,8	18.8	23, 1	27.6	31,8	40.1	41.0	0.16	26				
27	-33.0	0.16	1	-21.5	-12.7	0.0	9.6	18.9	22.5	26.3	29.7	35.8	49.1	50.0	0.16	27				

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

			TABL	E II-3	DISTRI	SUTION (OF ZON	AL WINE	S			1	ZONAL W	IND DIS	TRIBUT	ION _			
STATI	ON;		 .	SANTA	MONICA	CALIF	ORNIA												
REPEI	ENCE F	ERIOD:		FEBRU	ARY							S.	ANTA MO	ONICA, O	CALIFOR	INIA			
STATI	ON ELEV	ATION:		125 feet	or 38.1	ineters h	ASL			•			FEBRUARY						
STATI	ои соог	DINATE	is:	34.01 de	g N, 11	. 27 deg	w							-					
PERIO	D OF OF	SERVAT	NON:	Long Ne	ach, Cul	ifornia	January	1, 1956	April 17	, 1956			Positive for components from west						
			 ;		<u>·</u>	alifornia			-Decemb	per 31, 1	960		ative for						
DAŢĀ	SOURCE	:		U. S. W	eather B	Records areau Carolina						, n	D. OF OF	568	EACH L	.E. ¥ E. I.			
PREPA	ARED BY	·:	·	National	Aerona	itics and	1		UNITS:										
				Marshall Space Flight Conter, Aeroballistics Division Aerophysics and Astrophysics Branch, Huntsville, Alabama February 23, 1962									me	ters/sec	ond				
Alt.	Ext.	Pct				CUMULA	TIVE P	ERCENT	AGE FR	EQUENC	Y			Ext. Speed	Pct. Freq.	Alt. (MSL			
(MSL) km	Speed	Freq	0 135							97.72	99.0	99.865	,	<u> </u>	km				
∎fc	- 7.0	0.18		- 3.Z	- 1.2	- 0.3	0.2	1.9	2.8	4.1	5.2	. 7.1	13.2	14.0	0.18	aíc			
1	-14.0	0.18		- 8.9	- 2.5	- 0.2	0.8	2.6	3.8	. 6. 3	8.8	11.6	13.6	22.0	0.35	2			
2	-12.0	0.18		- 6.1	- 2.5	2.1	4.5	7.4 12.0	9.0 14.1	11.3	14.6	16.6 21.3	33.2	34.0	0.18	3			
3	-10.0	0.35		- 6.3	- 0.7 0.1	5.3 8.0	8.5 12.3	16.8	19.0	21.3	25.0	29.6	36.6	37.0	0.35	4			
4	- 9.0 -13.0	0.70 0.18		- 4.4	1.9	11.4	15.3	20.3	22.5	26.4	33.0	38.6	46.2	47.0	0.18	5			
6	-18.0	Q. 18		- 5.9	2.2	13.5	18.5	24.1	27.5	32.9	45.0	49, 1	57.2	58.0	0.18	6			
7	-22.0	0.18		- 4.6	3.3	15.5	21.0	27.7	31.8	42.6	53.5	59.6	67.2	68.0	0.18	7			
8	-20.0	0.18		- 4.3	4.9	18.5	24.9	32.6	36.8	50.8	59.0	63.3	79.2	80.0	0.18	8			
9	-13.0	0.18		- 5.5	6.3	21.0	28.4	37.3	42.8	54.2	62.0	65.3	85.2	86.0	0.18	9			
10	-21.0	0.18		- 5.7	8.6	24.1	31.3	41.6	48.2	58.3	66.0	73.3	84.2	85.0	0.18	10			
11	-14.0	0.18		- 0.8	11.8	27.5	34.3	44.9	52.8	61.1	68.0	76.3	86.2	8 7.0	0.18	11			
12 ,	-14.0	0.18		3.9	15.3	29.4	36. 1	47.0	53.0	58.8	66.6	75.1	84.2	85.0	0.18	12			
13	5.0	0.53		8.8	17.3	28.5	35.1	44.1	48.6	54.3	63.0	69.3	77.2	78.0	0.18	13			
14	4.0	0.35		8.9	17.2	26.7	31.5	39.0	43.5	49.8	55.5	63.1	68.2	69.0 63.0	0.18	14			
15	3.0	0.18		6.4	15.5 13.1	23.0 19.1	27.5	33. 1 27. 7	37.0	44.6 36.1	49.0	52.3 45.1	50.2	51.0	0.18	16			
16 17	-13.0 -14.0	0.18 0.18		47	9.8	15.3	18.0	23.5	26.8	29.9	32.6	36, 3	38.6	39.0	0.35	17			
18	- 6.0	0.18		2.1	6.3	11.0	13.8	18.1	20.7	24.0	27.0	29:3	32.2	33.0	0.18	18			
19	- 6.0	0.18		- 0.8	2.6	7.1	9.7	14.5	16.6	19.3	21.8	25. 1	29.2	30.0	0.18	19			
20	- 7.0	0.35		- 3.6	- 0.0	4.2	6.3	10.8	14.5	17.9	20.8	24.3	29.2	30.0	0.18	20			
21	-12.0	0.18		- 6.9	- 2.8	1.4	3.8	7.7	11.7	17.3	20.5	23,6	29.2	30.0	0.18	21			
22	-11.0	0.35		- 7.1	- 3.1	- 0.1	2.3	6.2	10.7	18.1	21.6	24.1	29.2	30.0	0.18	22			
23	-11.0	0.53		- 9.1	- 5.6	- 0.4	1.4	5.8	10.0	18,2	22.0	24.1	28.2	29.0	0.18	23			
24	-15.0	0.18	ŀ	-10.3	- 6.4	- 1.8	1.2	6.8	11.0	19.5	22.7	24.5	28.2	29.0	0.18	1			
25	-15.0	0.88		-12.1	- 7.9	- 1.6	1.4	7.8	13.6	19.3	24.2	26.3	30.2	31.0	0.18	1			
26	-20.0	0.18		-15.9	- 8.8	- 1.3	2.1	9.75	16.2	22, 3	26.8	29. 1	33.2	34.0	0.18	26			
27	-26.0	0.18	l	-16.4	- 9.3	- 2.4	1.4	12.1	18.2	25.6	30.6	32.4	36.2	37.0	0.18	27			

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

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			TABL	е п.4	DESTRI	BUTION	of Zon	AL WINE	ís.		*	7	ZONAL V	VIND DIS	TRIBUT	ION				
STATI					MONICA	, CALU	ORNIA						ANTA M	ONICA, (CALTEO	PNIA				
	RENCE,F			MARCH								- -	ANTA MA	onton, t	JADA O					
STATI	ON ELE	VATION:		125 (eet	or 38.1	inelers l	MSI.	9 14				MARCH								
STATI	ON COO!	RDINATE	S:	34.01 de	g N, Ili	27 deg	W													
PERIC	D OF OF		NON:					1, 1956 18, 1956			560 560		Positive for components from west Negative for components from east							
DATA	SOURCE					r Record	s Center					N	D, OF O	ns, for	EACH 1	EVEL				
	U. S. Weather Bureau Asheville, North Carulius REPARED BY: National Agreementics and Space Administration													620						
PREPARED BY: National Association and Space Administration Marshull Space Flight Center, Associations of the Marshull Space Flight Center, Association Association Association Association Association and Astrophysics Branch, Huntsville, Alabama														UNITS:						
February 23, 1962													ını	nters/sec						
Alt. (MSL)	Ext. Speed	Pet. Freq.	0.135	2.28	15.9	50.0	GE. 0	97, 72	99.0	99.865	Ext. Speed	Pçt. Freq.	Alt. (MSI km							
km sfc	- 5.0	0.65		- 3, 2	-1, 4	- 0.3	0.6	#4. i 2. 8	90.0 3.8	95.0 5.0	6,4	7.1	9.1	10.0	0,16	afo				
1	-12.0	0, 16		- 6.5	-2, 5	- 0.2	0. 9	2, 5	3.5	4.8	6.6	8.6	20.1	21.0	0.16	1				
2	-14.0	0.16		- 7.9	-2, 3	1.2	3.6	6.7	8.3	10.0	11,2	12.4	17.1	18.0	0, 16	2				
3	-13.0	0.32		- 8.0	-1,3	4. 2	7.4	11.4	13.6	15.5	17.4	19.9	26.1	27.0	0,16	3				
4	-18.Q	0.16		- 8.8	-0.3	6.6	10,4	15, 2	17.0	19.3	21.9	25,2	33.1	34.0	0.16	1				
5	-17.0	0.16		- 6.7	1.0	- 8, 4	13.1	18.1	20.8	24,1	27.2	29.6	38.1	39.0	0.16	5				
6	-20.0	0.16		. 6.7	1.6	11.3	16.0	20.6	23.8	26.7	30.6	33, 4	42. 5 50. 1	43.0 51.0	0, 32	6				
7 8	-22.0	0.16		- 9.8 - 7.0	2.8 3.9	13. 2 15. 5	18. 1 20. 7	23, 4 26, 4	26. 2 30. 1	31.0	34, 2 37, 4	37.8 41.9	58.1	59.0	0, 16	l a				
9	-19.0	0.16		- 9.5	5.7	17.8	23, 3	29.0	33.2	38.8	43,5	47.4	54.1	55.0	0.16	9				
10	-20.0	0.16		- 6.5	7.8	21.5	26.8	33.8	38 6	46.0	51.9	55.8	76.1	77.0	0,16	10				
11	-13.0	0.16		- 3.4	11.0	24.5	30.6	38.9	43.4	54.0	62.2	70.Z	80.1	81.0	0.16	11				
12.	- 3.0	0,16		0.7	14.5	27, 1	32, 4	39.4	44.7	54.6	61.9	66.9	85. 1	86.0	0.16	12				
13	0.0	0.97		2 . 1	16.3	26, 7	32. 3	38.3	42.1	48.4	53.8	58.7	66.1	67.0	0,16	13				
14	- 8.0	0.16		3.1	14.9	25. 1	29.7	35.7	38.5	43,2	50.1	52.9	58. 1	59.0	0.16	14				
15	- 2.0	0.16		1, 4	14.1	21.7	25.8	31.6	34.6	38.3	42.9	46.8	54.1	55.0	0.16	15				
16 17	- 1.0 - 2.0	0.16 0.48		0.3	12, 1 B, 9	18.8	22, 4 18, 1	27.7	29.9 25.4	32.7 28.2	37.2	40, 2 32, 9	45, 1 41, 1	46.0 42.0	0.16	16				
18	- 4.0	0.16		- 0.6	5, 5	10.5	13.6	18.1	19.9	22.5	26.3	28.9	38.1	39.0	0.16	18				
19	- 6.0	0,16		- 2.8	2. 2	7.0	9.3	13. Z	15.1	17.6	21.6	26.8	34.1	35.0	0.16	19				
20	- 9.0	0.16		- 4.7	-0, 4	3.9	6.4	9.1	11.3	14.0	18.8	24.9	31.5	32.0	0,32	20				
21	- 9.0	0.32		- 6.4	-2, 8	1.7	4, 1	7.1	9.0	11.4	15.2	22.4	29.5	30.0	0.32	21				
22	-10.0	0.65		- 7.5	-3.3	0.4	2. 9	5.8	7.1	9.6	12.6	18.9	25.5	26.0	0.32	22				
23	-12.0	0.16		- 9.7	-5.9	-0.1	2. 7	5.7	7.2	8.6	11.2	15.8	24, 1	25.0	0.16	23				
24	-16.0	0.16		-12.8	-6.3	-0.2	3.0	6.0	7.3	9.2	10.9	14.9	20.1	21.0	0.16	24				
25	-18.0 -	0.48		-13.0	-7. 2 9. 2	-0.0	4.2	7,3	8.7	10.5	12.8 14.4	15.6	17.1	18.0 20.0	0, 16 0, 16	25				
26 27	-22.0 -27.0	0.16		15.0	-8.2	-0,0 0,5	5.0 6.0	9. Z 10. 9	10.7	12,5	16, 2	17.5	21.1	22.0	0.16	27				
21	1-21.0	0.16		-17.4	-9.4	U. 5	0.0	1 '0.9	12.7	14.7	ا ۲۰۰۰ ا	11.5	l •"· '	I	I V. 10	1 "				

34																		
		•	TABL	E II-5	DISTRI	BUTION	OF ZON	AL WINI	os				ZONAL WIND DISTRIBUTION					
STATE	ON: RENGE F	ERIOD:		SANTA APRIL	MONICA	, CALIF	ORNIA	, , ,				5.	ANTA M	ONICA, C	CALIFO	RNIA		
	ON ELEV			125 feet	or 58.1	meters	MSL					T		APRIL	•			
					·													
STATI	ON COOF	RDINATE	es:	34.01 d	eg N, II	⊁ 27 deg	W											
PERIO	D OF OR	SERVAT	rion:						-April II -Decemb	7, 1956 ber 31, 1	960		itive for ative for					
DATA	DATA SOURCE: National Weather Records Center U. S. Weather Bureau													BS. FOR	EACH L	EVEL:		
	Asheville, North Carolina													600 UNITS:				
PREPA	PREPARED BY: National Aeronautics and Space Administration Marshall Space Flight Center, Aeroballistics Division Aerophysics and Astrophysics Branch, Hunts file, Alabama												mi	ong:::				
A1:	Alt. Ext. Pet. CUMULATIVE PERCENTAGE PREQUENCY													Ext.	Pct.	Alt		
(MSL)	Speed	Freq	9 135	2.28	15.9	50.0	6E. 0	99.0	99.865	Speed	Freq.							
efc	- 6.0	0.17		-3.4	- 1.7	- 0.0	1.7	3.5	4.5	5.6	6.8	8.D	12.1	13.0	0.17	sfc		
1	- 9.0	0.17		-4.0	- I.O	- 0.1	1.0	2.8	3,7	5.4	7.0	9.5	16.1	17.0	0.17	, ,		
2	-14.0	0.17		-7.8	- 2.6	1.2	3.4	6.1	7.4	9.6	11.7	14,0	22.1	23.0	0.17	2		
3	-11.0	0.33		-7.8	- 2.1	2.9	5.9	10.2	12.2	14.3	17.1	19.4	26.1	27.0	0.17	3		
4	-17.0	0.17		-7.5	- 1.4	5.1	9.1	13.5	15.3	18.8	22.0	23.7	39.1	40.0	0.17	4		
5	-16.0	0.17		-6.3	- 0.5	7.5	11.8	16.5	19.5	23.0	27.4	30.6	44.1	45.0	0.17	5		
6	-18. Ø	0.17		-6.5	0.3	9.7	13.9	20.4	23.2	28.4	34.0	40.0	48.5	49.0	0.33	6		
7	-23.0	0.17		-6.8	1.4	11.7	16.9	22.8	26.7	34.5	41.1	47.5	68.1	69.0	0.17	7		
8	-20.0	0.17		-5.8	3.0	14.6	19.4	27.1	31.3	38.0	43.8	57.0	70.5	71.0	0.33	8		
9	-19.0	0.17		-4.3	3.9	16.3	22.1	31.0	35.4	42.0	47.4	54.0	71.1	72.0	0.17	9		
10	-17.0	0.17		-4,2	5.1	18.7	25.7	34 1	38.5	42.6	50.1	54.0	64.1	65.0	0.17	10		
11	- 9.0	0.17		-3.7	6.8	20,5	28.3	36.5	40.5	45.6	50.8	56.0	68.1	69.0	0.17	11		
12 ,	- 7.0	0.17		-0.6	9.5	21.9	29.2	36.4	40.0	44.8	50.1	56. D	59.1	60.0	0.17	12		
13	- 1.0	0.33		4.2	11.5	22.4	28.1	34.1	37.4	41.7	47.1	54.0	76.1	77.0	0.17	13		
14.	Q.0	0.17		5.5	12.1	20.8	25.6	30.3	34.5	36.8	40.3	44.D	58.1	59.0	0.17	14		
15	3.0	0.33		5.9	11.4	18.7	22.7	26.6	29.1.	31.6	33.9	37.6	45. i	46.0	0.17	15		
16	0.0	0.17		4.4	9.6	15.8	19.1	23.0	25.2	27.8	28.9	31.3	43.1	44.0	0.17	16		
17	- 8.0	0.17	·	2.4	7.1	12.5	15.2	18.4	20,2	22.2	23.9	25.B	28.1	29.0	0.17	17		
18	- 1.0	0.33		0.2	4.2	8.6		13.9	15.9	18.1	19.8	22,5	28.1	29.0	0.17	18		
19	- 5.0	0.17		-1.1	1.4	5.4	7.3	9.7	11.5	13.0	16.4	18.7	23.1	24.0	0.17	19		
20	- 7.0	0.17		-3.1	- 0.6	2.9	5.1	7.0	8.2	10.3	12.7	15.6	22.1	23.0	0.17	20		
21	- 9.0	0.33		-6.7	- 1.0	1.0	2.8	5.5	6,6	8.0	10.0	11.7	18.1	19.0 12.0	0.17 0.33	21		
22	-11.0	0.17		-7.8	- 3.9	0.1	1.6	3.9 3.4	5, Z 4, 8	6.3	7.7 7.9	9.3 9.3	15.1	16.0	0.33	22 23		
23	-10.0	0.17		-7.9	- 3.4	- 0.4 - 0.5	0.7	3.4.	4.9	6.3 6.8	8.7	10.5	16.6	17.0	0.17	24		
24	-14.0	0.17		-7.2	- 3.3		1.0	4.3	6.3	9.3	10.8	12.5	19.1	20.0	0.17	25		
25	-15.0	0.33		-9.5	- 3.6	- 0.4]		7.4	11.3	14.5	18.0	28.1	29.0	0.17	26		
26	-13.0 -12.0	0.33											24.1	25.0	0.17	27		
27	-12.0	U. 33	L	-9.7 - 2.4 0.9 3.3 7.1 9.6 12.8 16.3														

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.2F and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

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	÷		TABL	E II-6	DISTRI	BUTION	of zon	AL WINE	os				ZONAI, V	ring dis	TRIBUT	IÓN
STATI	ON:	•		SANTA	MONICA	, CALIF	ORNIA									
REFE	RENCE F	ERIOD:		MAY								- 5	ANTA MO	DNICA, C	ALIFO	KNIA
STATI	ON ELEV	VATION:		125 feet	or 38. I	meters	MSI.					Ĺ		MAY		
STATI	ON COOL	RDINATE	5 S :	14.01 de	g N. II	- 27 deg	W									
PERIO	D OF CI	SERVAT	rion:					1, 1956 18, 1956			C(10):		tive for a			
DATA	SOURCE					r Record	····		-116.00			- - 	O, OF O			
				U. S. W Ashevill		Sureau Carolin	a							620		
PREP	ARED BY	7:		National Marshal	Aerona I Space	utles and Flight Co	Space A	deninistr eroballis	tics Divi					UNITS:		
				Yebruar	y 23, 19	62		anch, H					me	ters/sec		
Alt. (MSL)	Ext. Speed	Pct. Freq.	0.135	2.28	15.9	CUMUL.	TIVE P	ERCENT 84. I	90.0	25.0	97. 72	29.0	99.865	Ext. Speed	Pet. Freq.	Alt. (MSL)
km afc	- 3.0	1. 29	0.133	- 2, I	-1.7	0,3	2, 2	4.1	4.9	5.9	7.4	8.8	15.1	16.0	0.16	km efc
1	- 7.0	0.32		- 3.0	-1.0	-0.3	0.6	2. 2	3.0	4.4	5, 5	6.6	7,7	8.0	0.65	1
2	-10.0	0.16		- 6.2	-2.5	1.3	3.1	5.3	6.3	8, 1	10,4	11.7	13.5	14.0	0.32	z
3 .	-11.0	0.32		- 7.5	-3.9	2.6	5,6	9.2	10.7	13, 1	14, 7	16.9	20.1	21.0	0.16	3
4	-12.0	0.16	·	- 7.8	-1.9	4, 7	7.9	12.5	14.7	18.0	20.9	22.7	36.1	37.0	0.16	4
5	- 9.0	0.16		- 5.5	-0.0	6, 8	10. Ì	15.0	17.7	22.3	27.4	31.3	35, 1	36.0	0,16	5
6	-10.0	0.16		- 4.7	1,4	8.9	12.5	17.4	21.3	26.5	33.9	37.9	42. 1	43.0	0.16	6
7	- 9.0,	0.16		- 5.7	1.8	10,7	15.0	20.4	24.2	30.5	38.6	42.6	48. 1	45.0	0.16	7
8	-11.0	0.16		- 3.3	3, 1	12, 8	17.5	23.4	27.6	33.5	41.7	47.8	57. 1	58.0	0.16	8
9	-13.0	0.16		- 3.5	4. 7	14.7	19.8	25.7	30.3	37.5	44. 2	48.4	51.5	52,0	0.32	9
10	-16.0	0.16		- 1,3	6.7	17.0	22. 3	28.6	33.4	40.3	47.7	50.8	57.1	58.0	0.16	10
11	-12.0	0.16		0.7	8.5	19.5	24. 7	31.8	35.1	41.2	48.7	53.9	61.1	62.0	0,16	11
12 .	-12.0	0.16		2.3	10.6	21.0	24.9	32, 2	35,8	41.6	48. 2	55.8	64, 1	65.0	0.16	12
13	2.0	0.32		4. 2	11.4	19.8	24.5	30.8	34.4	39.7	45. 2	50.8	61.1	62.0	0.16	13
14	2.0	0.32		4,6	10.5 9.0	18, 3 15, 2	22. 1 18. 8	27. 4	30.5 25.5	34.6 28.5	38.6 32.2	44.9 37.9	49.5 46.1	50.0 47.0	0.32	14
16	- 4.0	0.05		2, 3	6.3	11.7	14.9	18.5	20.6	24.0	27.5	30.8	38. 1	39.0	0.16	16
17	- 3.0	0.48		- 0.8	3, 1	8.3	10.8	14.0	16,1	18.7	21.9	24,8	30.5	31.0	0.32	17
18	- 6.0	0, 32		- 2, 2	-0.1	4.4	6.6	9. 5	11,2	13.2	15.6	17.9	25. 5	26.0	0.32	18
19	-14.0	0,32		- 6.5	-2.8	1.2	3.1	5.5	6.6	8,5	10.5	12.8	19.1	20.0	0.16	19
20	-15.0	0.32		- 9.7	-4,6	-0.8	0, 4	2. 3	3,3	5.0	6.7	9.1	10.5	11.0	0.32	20
. 21	-16.0	0.16		- 9.5	-5,6	-1.2	-0.5	1,2	2.2	3.6	4.8	5.7	10.1	11.0	0.16	21
22	-16.0	0.16		- 8.0	-5,0	-2,4	-1.9	0.0	1, 1	2,6	3.6	4.5	6.1	7.0	0.16	22
23	-19.0	0.16		-11.8	-6.2	-2.0	-1.6	-0.0	1.3	2.6	4.5	5.6	7.1	8.0	0.16	23
24	-22.0	0.16		-14.8	-7.7	-3.9	-1.6	-0.1	1,1	2,8	4.9	6.9	15.1	16.0	0.16	24
25	-25.0	0.16		-14.1	-7,5	-4.0	-1.7	0.0	1,2	3,2	5, 3	6,6	11,1	12.0	0.16	25
26	-25.0	0.16		-12.5	-7.4	-2.0	-O.B	0.3	1,6	4.0	5.9	7.9	11,1	12.0	0.16	26
27	-22.0	0, 32		-12.5	-7, 2	-2,4	-0.5	1.3	2.8	5, 1	6. B	8.7	13, 1	14.0	0,16	27

			TABL	E II-7	DISTRI	NOITUE	OF ZON	AL WIND	s			Z	ONAI. W	IND DIS	TRIBUT	ION
STATIO			-		MONICA	, CALIF	ORNIA	*****		411-41		5/	NTA MO	ONICA, C	CALIFO	RNIA
	ON ELEV			JUNE 125 (ust	or 38.1	molers)	dS1.					-		JUNE		
.,,,,,,,,	J(1.12.			10, 1001										JONE		
STATIO	ON COOF	DINATE	S:	34.01 d	g N, 111	< 27 deg	W									
PERIO	D OF OB	SERVAT	ION:	Long Bo Santa M	onica, Cal	iforna alifornia	Janua ry April	1, 1956- 18, 1956	April 17 - Decemb	, 1956 er 31, 1	960			componer		
ATA	SOURCE	:		U. S. W	Weather P	hireau						NO	OF OF	600	EACII L	EVEI.
PREPA	RED BY	:		Nationa	le, North LAeronai Il Space	ities and	Space A	dininistr	ation	sion				UNITS		
_				Aerophy	sics and y 23, 19	Astroph	ysics Br	anch, H	ntsville,	Alaban	ıa		me	ters/pac	ond	
Alt.	Ext.	Pct.				CUMULA	TIVE P	ERCENT	AGE FR	EQUENC	Y			Ext.	Pet.	Alt. (MSI.
(MSL) km	Speed	Freq.	0 135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	km
efc	- 3.0	0.50		- 2.5	- 0.9	0.3	1.8	3.7	4.4	5,2	5.9	6.5	7.1	8.0	0.17	•fc
1	-10.0	0.17		- 4.2	- 1.0	- 0.2	0.6	2.1	3.0	4.4	5.5	7.0	11.1	12.0	0.17	1
2	- 8.0	0.17		- 4.1	- 1.3	1.4	3.2	5.5	6.7	8.6	9.9	11,2	12.5	13.0	0.33	2
3	-15.0	0.17		- 6.1	- 2.4	1.8	5.0	8.8	10.5	12.0	13.8	15,6	19.1	20.0	0.17	3
4	-13.0	0.17		- B.7	- 1.0	2.7	5.9	10.2	12.2	14.6	16.6	17.7	20.1	21.0	0.17	4
5	-13.0	0.17		- 8.6	- 1.5	3.2	7.0	11.4	12.8	15.5	18.4	20.0	28.1	29.0	0.17	5
6	-17.0	0.17		- 8.5	- 1.6	4.3	8.3	12.9	15.3	18.5	20.8	24,0	29.1	30.0	0.17	6
7	-19.0	0.17		- 8,0	- 0.8	5.4	9.4	14.3	17.1	19.8	23.8	26.5	32.1	33.0	0.17	7
В	-21.0	0.17		-10.2	- 0.5	7.0	10.9	16.4	19.2	22.6	25.4	30.0	39.1	40.0	0.17	8
9	-22.0	0.50		-12.9	- 0.5	8.5	13.1	17.9	20.7	23.9	26.4	31.3	35, 1	36.0	0.17	9
10	-28.0	0.17		-13.8	- 0.5	11.0	15.6	20.8	24.0	27.4	31.2	32.7	42.1	43.0	0.17	10
11	-31.0	0.17		-13.8	0.5	13.5	18.4	24.4	27.1	29.8	31.9	38.0	43.5	44.0	0.33	11
12	-30.Q	0.17		-12.8	2.4	15.0	20.0	25.6	27.8	30.6	34.3	42.0	45.1	46.0	0.17	12
13	-31.0	0.17		- 8.9	4.7	15.8	20.0	25.0	27.7	31.6	36.1	41.0	54.1	55.0	0.17	13
14	-23.0	0.17		- 2.6	5.4	14.6	18.0	22.5	25,1	29.0	32.7	36.0	41.1	42.0	0.17	14
15	-10.0	0.17		- 2.8	4.8	11.3	14.2	17.8	20.1	22.5	25.1	28.0	32. I	33.0	0.17	15
16	- 8.0	0. 33		- 2.5	2.4	7.2	9.5	12.0	14.4	17.6	20.7	22.5	27.1	28.0	0.17	16
17	- 8.0	0.17		- 4.0	- 0.6	2.9	4.8	7.2	8.5	10.4	12.7	17.0	21.1	22.0	0.17	17
18	-15.0	0.17		- 7.1	- 3.5	- 0.5	0.5	2.7	4.1	5,8	7.4	11.0	16.1	17.0	0.17	18
19	-16.0	0.17	1	-10.6	- 6.6	- 2.0	- 1.3	- 0.3	0.3	1.7	3.6	4.7	6.1	7.0	0.17	19
20	-16.0	0.33	1	-12.5	- 8.7	- 5.9	- 3.3	- 2.8	-1.7	-0,3	0.7	1.8	5.5	6.0	0.33	20
21	-18.0	0.17		-13.5	- 9.3	- 6.4	- 5.7	- 3.4	-2.2	-1.0	- 0.7	0.6	9.1	10.0	0.17	21
22	-21.0	0.17	l	-14.9	-10.2	- 7.2	- 6.4	- 4.1	-3,2	-2.8	- 0.9	0.3	11.1	12.0	0.17	22
23	-20.0	0.17	•	-15.9	-11.3	- 8.4	- 7.8	- 5.4	-4.4	-3,7	- 1.1	-0.4	11.1	12.0	0.17	23
24	-24.0	0.17		-16.4	-12.3	- 9.9	- 7.3	- 6.9	-5.8	-3,2	- 2.4	-1.2	- 0.2	0.0	0.50	24
25	-24.0	0.37		-17.7	-13.6	- 9.3		- 6.6	-5.7	-3,3	- 2.2	-2.8	- 1.7	- 1.0	0.67	25
26	-30.0	0.17	l	-18.6	-33.2	-10.2	•	- 6.7	-5.9	-3,5	- 2.7	-1,6	- 0.2	0.0	0.50	26
	1 -3.5	1	ı	1	F	l .		1	1	l	t:	i.	P.		P	1

NOTE: {1} When the percent frequency of extreme speed exceeded the 2.28 and/or 0:135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

			TABL	C 11-8	DISTRIB	UTION C	F ZONA	L WINDS				z	ONAL W	IND DIST	rributi	ÒИ
STATIO	ON: RENCE P	ERIOD:		SANTA N	(ONICA,	CALIFO	RNIA					SA	NTA MO	NICA, C	ALIFOR	NIA
STATIO	ON ELEV	ATION:		125 feet	or 38. L	neters N	15L							JULY		
STATIO	ON COOF	DINATE	:S: ·	34,01 da	g N, 114	27 deg	w			 		· ·			•	
PERIO	D OF OF	SERVAT	'ION:	Long Bo	ach, Culi	fornia difornia	January April l	1, 1956- 8, 1956-	April 17, Decembe	. 1956 er 31, 1	900			compone		
DATA	SOURCE	:		National U. S. W	Weather	Record						NC	, OF OF	S. FOR 620	EACH L	EVEL:
PREP	ARED BY	·:	<u>•</u>	Ashevill	Aeronau	Carolinatics and	Space A	roballist	ica Divis	ion Alaban	18		me	UNITS:	ond	
				l'ebruar	y 23, 190	52	TIVE P							Ext.	Pct.	Alt.
Alt. (MSL)	Ext. Speed	Pct. Fraq.	0.135	2.28	15.9	50.0	60.0	84. I	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL) km
km efc	- 4.0	0,32		- 2.9	- 0.8	0.6	1.9	3.5	4.1	4.7	5.3	5,8	8. 1	9.0	0,16	sfc .
1.	9.0	0,32		- 4.0	- 2.8	- 0.4	0.2	1.4	2.1	3,3	3.9	5.4	7.5	8.0	0,32	1
2	-15.0	0.16		- 5.1	- 1,4	0.8	2, 4	3, 8	5.1	6.3	7.4	7.9	11.1	12.0	0.16	2
3	-12.0	0, 16		- 7, 2	- Z.3	1.0	3.4	5.7	7.1	8.6	9.8	11.3	13.1	14.0	0,16	3
4	-11.0	0.32		- 8.5	- 3, 4	1,0	3.6	6.8	8.3	10.1	11,1	12.7	17.1	18.0	0.16	4
5	-12.0	0.32		- 8.0	3,1	1.1	4. 2	7.3	9.0	11.1	12,4	13.9	20.1	21.0	0,16	5
6	-13,0	Q. 48		- 9.0	- 3.0	1.8	5.0	8.5	10.4	12,2	13.9	17.4	24; 1	25.0	0.16	6
7	-14.0	0.32	1	- 9,6	- 3.5	2.9	6.4	10.6	12.5	14.8	17. 2	22.8	27.1	28. 0	0,16	7
8	-14.0	0,16		- 8.5	- 2.2	4. 3	7.8	12.5	14.6	18.0	19.8	22.9	29.1	30,0	0.16	8
9	-15.0	0.16	1	- 8.8	- 2.9	5. 1	9.7	15.0	17.5	20.0	22.4	24.9	29.1	30.0	0.16	9
10	-14.0	0.16	1	- 7.2	- 1.6	6.8	11,3	17, 4	20.3	23,2	26.9	29. 4	30.7	31,0	0.48	10
11	-16.0	0.16		- 7.2	- 0.8	8.0	12.7	19.6	22, 2	25.2	27.9	29.9	34, 1	35.0	0,16	11
12 .	-13,0	0.32		- 8.5	- 0.4	8.7	14, 4	20.9	23.6	26.7	28.8	32.2	37, 1	38.0	0, 16	12
13	-13.0	0,16		- 7.6	- 0.3	8. 3	14.4	19.B	23.2	26.6	28.8	30.9	34.1	35.0	0.16	13
14	-10.0	0,32	İ	- 7.7	- 0.6	6.8	11.6	17.6	21.1	23.3	24.9	26.5	30, 1	31.0	0.16	14
15	-10.0	0.32		- 7.1	- 1.5	4.6	7.8	12.8	14.9	17.0	18.4	20.6	26.1	27.0 19.0	0, 16	16
16	-11.0	0.16		- 7.0	- 3.3	1.0	3, 8	7.4	9,4	11.5	14.6	15.9	18.1	19.0	0.16	17
17	-13.0	0.16		- 9.0	- 5.5	-1.3	- 0, 1	2, 5	4.1	5.8	7.7	9.6 4.6	8,1	9.0	0.16	18
18	-13.0	0.16		-11.8		-4.6	- 2.4	-0.5	-2.9	2.0	2.9 -0.0	1.1	7.1	8.0	0.16	19
19	-15.0	0.16	1	-12.3	1	-6.5	- 4.2	-3.9 -5.6	-4.7	-2.3	-1.6	-0.5	1,5	2.0	0, 32	20
20	-18.0	0,16		-13.0	-11.7	-8.7	- 6.1	-6.0	-6.9	-4.6	-2.1	-1,3	-0.2	0.0	0,48	21
21	-18.0	0, 32		-15, 3 -16, 0	-12. Z -14. 8	-11,6	- 8.3	-8.5	-7.5	-6.7	-4.4	-2.1	-0.8	0.0	0.16	22
22	-22. 0 -22. 0	0, 16	Ī	-18.4	-14.0	-12.3	-10.9	-9.4	-8.5	-7.9	-6.9	-3,5	-1.1	-1.0	0.16	23
23 24	-22.0	0.16		-19.7	-16, 2	-13.3	-12.6	-10.0	-9.2	-7.2	-6.8	-3,1	-1,5	-1.0	0, 32	24
25	-26; 0	0.32	1	-20.0	-17.3	-14.5	-13.9	-11.6	-10.7	-8.6	-7.9	-5.4	-1,5	-i.0	0.32	25
26	-26.0	0.18		-22.5	1	-15.5	-13.2	-11.0	-11.9	-9.6	-7.4	-6.4	-1.1	-1.0	0.16	26
27	-28.0	0.16		-24.6	-20.8	-16.8	-14.5	-12.4	Ì	-10.7	-8.4	-6.9	8.1	9.0	0, 16	27
L "	-20.0	1	<u> </u>	- 2-3, 0		<u> </u>				<u></u>			ــــــــــــــــــــــــــــــــــــــ	ــــــــــــــــــــــــــــــــــــــ	ne aneed	

NOTE: (1) When the percent frequency of extreme speed exceeded the Z. 28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

			TABL	E II-9	DISTRI	BUTION	OF ZON	AL WIND	os			Z	ONAL W	VIND DIS	TRIBUT	ION
STATI	ON;			SANTA	MONICA	, CALIF	ORNIA	· · · · ·				+				
	RENCE I			AUGUST					· · · ·			57	NTA MO	ONICA, C	CALIFOR	INIA
STATI	ON ELE	VATION:		125 feet	or 3E.1	meters]	MSL.							AUGUST		
STATI	ои соог	RDINATE	:S:	34.01 d	eg N. 11	⊱ 27 deg	w				-					
PERIO	D OF OF	SERVAT	'lov:	Long Po Santa M	ach, Cal	iforma alifor ņia	January April	1, 1956 18, 1956	-April 17 -Decemb	, 1956 er 31, 1	960			compone compone		
DATA	SOURCE			U.S. W	eather [NO	o, of or	0S. FOR 620	EACH L	EVEL:
PREPA	ARED BY	' :		National Marsha	Aerma i Space	r Carolin utics, and Flight Co L Astroph	Space A Inter, A	roballis	ation tics Divi	siori Alaban	ıa			UNITS:		
				Pebruar	y 21, 19	62							me		_	
Alt. (MSL)	Ext. Speed	Pct. Freq.	0 135	2.28	15.9	50.0	GE. 0	F4.1	AGE FR	25.0	97.72	99.0	99.865	Ext. Speed	Pct. Freq.	Alt. (MSL)
km	3.0	0.45	7 135	- 2.4	- 0.8	0.6	1.8	3.4	4.1	4.8	5.4	5.8	6.7	7. đ	0.48	km efc
•fc l	- 3.0 - 7.0	0.48 0.32		- 4.1	- 0.8	- 0.4	0.1	1.4	2.2	3.3	4.2	4.9	7.1	8. O	0.16	1
2	- 9.0	0.16		- 6.8	- 1.1	0.4	1.7	3. 2	4.0	5.4	6.7	9.4	11.1	12.0	0.16	2
3	-12.0	0.16		- 7.4	- 2.2	0.5	2.7	4.8	6.1	7.8	9.1	10.6	14.7	15.0	0.48	3
4	-14.8	0.16		- 7.0	- Z. I	0.8	3.5	6.5	8.0	9.7	11.3	12.3	16.1	17.0	0.16	4
. 5	-14.0	0.16		- 8.0	- 2.8	1.4	4.1	7.3	9.4	11.3	12.8	.14.3	15.7	16.0	0.48	5
6	-14.0	0.16		- 7.1	- 2.7	2.4	5.1	8.3	10.4	13.0	14.4	16.4	24.1	25.0	0.16	6
7	-18.0	0.16		- 8.6	- 2.9	3.1	6.2	10.2	12.1	14.5	17.3	18.4	22.1	23.0	0.16	7
8	-15.0	0.16		- 8.0	- 1.5	4.2	7.9	12.0	14.2	16.2	18.4	20.4	24.1	25.0	0.16	8
9	-17.0	0.16		- 8.1	- 0.8	5.1	8.9	14.5	17.3	20.4	22.1	24.6	29.1	30.0	0.16	9
10	-23.0	0.16		- 9.4	- 0.6	6.6	10.8	16.9	19.3	22.2	25.4	27.2	35.1	36.0	0.16	10
11	-24.0	0.16		-10.6	- 0.3	8.3	12.5	19.2	21.6	25.1	28.4	30.4	36.1	37.0	0.16	11
12	-31.0	0.16		-10.7	- 0.2	9.1	13.7	21.9	24.6	29.0	32.2 31.8	34. 2 34. 4	38.1 38.5	39.0 39.0	0.16	12
13	-14.0	0.16		- 8.7 - 8.5	0.1 0.1	8.8 8.0	13.8	21.2	24.0 20.0	28.6	26.4	28.1	30.1	31.0	0.16	14
14 15	-17.0 -12.0	0.16		- 5.1	- 0.7	5.3	8.7	12.8	14.7	17.5	19.9	21.9	24.7	25.0	0.65	15
16	- 9.0	0.48		- 6.4	- 1.1	2.0	4.5	7.7	9.3	12.0	14.7	18.4	22.1	23.0	0.16	16
17	-10.0	0.32		- 7.8	- 3.0	- 0.8	0.4	2.7	4.3	6.4	9.4	12.4	16.5	17.0	0.32	17
18	-13.0	0.16		- 8.0	- 5.0	- 2.0	-1.4	- 0.3	0.3	1.9	3.9	8.8	15.1	16.0	0.16	18
19	-16.0	0.16		-10.2	- 8.8	- 5.6		- 2.6	-1.7	-0.3	1.9	2.8	8.1	9.0	0.16	19
20	-16.0	0,16		-12.1	-10.8	- 7.7	- 5.3	- 3.2	-2.3	-1.3	- 0.5	٥.۵-	3.1	4.0	0.16	20
21	-16.0	0.48		-14.3	-11.2	- 9.9	- 7.2	- 5.1	-4.4	-3.7	· - 2.7	-1.5	- 0.2	0.0	0.48	21
22	-20.0	0.16		-16.5	-13.5	-10.1	- 9.5	- 7.3	-6.3	-5.5	- 4.9	-2.1	- 0.8	0.0	0.16	22
23	-27.0	0.16		-17.1	-14.0	-12.9	-10.2	- 8.0	-7.1	-6.1	- 5.3	-3.4	- 0.8	0.0	0.16	23
24	-26.0	0.32		-19.5	-16.8	-13.6	-11.0	-10.8	-9.9	-7.1	- 6.4	-5.1	- 4.5	- 4.0	0.32	24
25	-27.0	0.16		-20.1	-17.5	-14.7	-12.4	-11.8	-9, 1	-8.6	- 7.6	6.4	- 3.1	- 3.0	0.16	25
26	-28.0	0.32		-21.3	-18.6	-15.9	-13.6		-10.5	-8.2	- 7.4	-6.4		- 5.0	0.32	26
27	-31.0	0.16		-23.5	+19.8	-15.Z	-13.0	-12.9	-12.0	-8.2	- 7.5	-6.9	- 4.1	- 4.0	0.16	27

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

		 	TABL	E 11-10	DISTRI	UTION	OF ZON	AL WIND)S				ONAL W	IND DIS	TRIBUT	39 10N
				. ,							· 	-				
STATIC REFER	ON: RENCE F	ERIOD:		SANTA I		CALIF	ORNIA .		1. 1		·.	5/	NTA MO	ONICA, (ALIFOR	NÏA
STATIO	ON ELEV	ATION:		125 feet	or 38.1	inglers !	MSL						. 8	EPTEM	BER	-
STATIO	ON COOF	RDINATI	ES:	34.01 de	g N. 11	27 deg	w			·						1.1
PERIO	D OF OF	SERVAT	rion:	Long Be Santa M	ach, Cal onica, C	ifornia 4lifornia	January April	1, 1956- 18, 1956	-April 17 -Decemb	, 1956 Ser 31, 1	960			compone		
DATA	SOURCE	:		Ú. S. W	eather B	ureau	• Center				-	NO	O. OF O	BS, FOR 600	EACII L	EVEL:
PREPA	ARED BY	7 :	<u> </u>	National	Aerona	itics and	Space A	dininistr	ation	sion.		+		UNITS:		
				Aerophy	vice and y 23, 19	Astroph	ysics Br	anch, H	intsvilla	Alaban	18		me	ters/sec	ond	
Alt. (MSL)	Ext. Speed	Pct. Freq.					TIVE P		AGE FR	EQUENC	1			Ext. Speed	Pct. Freq.	Alt. (MSL)
km.	obeea	rreq.	0.135	2. 28	15.9	50.0	68.0	P4.1	90.0	95.0	97.72	99.0	99.865			km
efc	- 4.0	0.50		- 2.1	- 1.8	-0, 1	1,2	3, 1	3.7	4.5	5.0	6.0	7.1	8.0	0.17	•fc
1	- 7.0	4 0.17		- '4,1	- 2.6	-0.3	0.4	1.7	2.4	3.4	4.3	5.0	6.7	7.0	0,50	1
2	-12,0	0, 17		- 7.5	- 2.2	0.3	2.2	4. 2	5.5	6.7	7.7	9.4	14.1	15.0	0.17	2
3	-14.0	0.17		- 9.7	- 4.6	1.0	3.2	6.0	7.6	9.5	11.0	12.6	15.1	16.0	0, 17	3
4 -	-12.0	0.33		- 8.2	- 3.6	1,4	3.8	7. 2	9.3	11.9	15.0	17.2	23.1	24, 0	0.17	4
5	-10.♥	0.50		- 7.5	-, 2, 1	2. 5	5,6	8.5	10.6	13, 6	16.1	19.0	26, 1	27.0	0.17	5
. 6	-11.0	0.17		- 7, 2	- 2.6	4. 4	7.0	10.7	12.8	16.0	19.5	24.0	32.1	33.0	0.17	6
7	-20.0	0.17		- 9.7	- 1.2	5,6	9.2	13, 2	15,4	20.2	22.6	31.0	34.1	35.0	0,17	7
8	-15.0	0.17	1	-10.4	- 1,6	7.6	11.7	15.7	19.5	23.8	29.3	35. 3	45, 1	46,0	0, 17	8
9	-14,0	0.17		-10.4	- 0.7	9, 1	13.4	19.6	23.4	27.3	32.3	36.5	43.1	44. 0 49. 0	0.17	10
11	-19.0 -24.0	0.33	İ	-11.B	- 0.0 1.6	11.3	16.6 18.8	23.7 27.5	26.6 31.0	30.7	35. 4 37. 7	39.5 42.5	57.1	58.0	0.17	111
12	-27.0	0.17	İ	-12.7	3.3	16.8	21.5	29.6	33.4	36.0	39.0	41.5	46.1	47.0	0, 17	12
13	-19.0	0.33	l	- 8, 8	5.4	18.0	22, 5	28.5	31.4	35,4	39.4	41.7	48.1	49.0	0.17	13
14	-15.0	0.17		- 5.8	5.4	16.0	20.3	24.6	27.5	31.3	34.4	39.0	44.1	45.0	0.17	14
15	-12.0	0.50		- 2,1	3.9	12, 4	15.8	19.9	22.0	24.4	27.3	30.0	36.5	37.0	0.33	15
16	- 9.0	0.17		- 3, 2	1.6	7.7	10.8	14, 4	16.2	18.2	22.1	24, 2	28.1	29.0	0.17	16
17	-10.0	0.17		- 5.6	- 0.9	3, 4	5.9	8.8	10.6	12.8	16.0	19.0	21.1	22.0	0.17	17
16	-15,0	0.17	Ì	- 7.7	- 2, 1	-0.0	2.0	4.4	5.9	7.9	10.4	11.5	18.5	19.0	0, 33	18
19	-11.0	0.33		- 7.2	- 4.6	-1.7	-0.1	1.9	3.2	4.7	6.3	8.0	14.1	15.0	0.17	19
20	-18.0	0,17		- 8.2	- 5,1	-2, 3	-1.8	-Ò, 1	1. 1	2.3	3.5	5.0	11.1	12,0	0.17	20
21	-12.0	0.17		-10.7	- 6.0	-3, 1	-2.6	-0.7	-0.1	0.9	2.0	2.8	5.5	6. Q	0.33	21
22	-13.0	0.50		-11.9	- 8.9	-6.0	-3, 4	-1, 4	-0.7	-0.0	1.0	2, 4	5.1	6.0	0.17	22
23	-18.0	0.17		-12.4	- 9,6	-5.0	-4.9	-2.8	-1.7	-0.1	1.3	2. 2	5, 1	6.0	0.17	23
24	-22.0	0.17		-13.2	-10.6	-6, 2	-4.1	-2, Z	-1,3	-0.4	1.7	3.0	9.1	10.0	0.17	24
25	-19.0	0,17		-15.5	-11.9	-7.B	-5.7	-2, 1	-1.2	-0.3	1.6	4.0	8.1	9.0	0.17	25
26	-18.0	0, 33		-15.1	-11.4	-7.5	-5.6	-2. 2	-1.3	-0.3	1.7	5.0	10,1	11.0	0,17	26
27	-20,0	0.17	<u> </u>	-17.9	-11.2	-7,5	-5,6	-2.6	-1.8	1.0	3, 3	6, 2	10.1	11.0	0,17	27

			TABL	E 11-11	DISTRI	BUTION	OF ZON	AL WINI	os			3	ZONAL V	VIND DIS	TRIBUT	ION
STATIO	ON:	ERIOD:		SANTA		CALIF	ORNIA	•				S	ANTA M	ONICA, (CALIFO	RNIA
	ON ELEV				or 38.1	meters	MSL							остов	ER	
																
STATI	ON COOF	CDINATE	.s:	34. Ut de	ng N, 110	s. Zr deg	· ,									
PERIO	D OF OF	SERVAT	'ION:	Long Bo Santa M	ach, Cul onica, C	ifornia alifornia	January April	1, 1956 18, 1956	-April 17 -Decemb	7, 1956 per 31, 1	960		tive for			
DATA	SOURCE	:	· · · · · · · · · · · · · · · · · · ·		Weather E		s Center					N	n. of o	BS. FOR 620	EACH L	EVEL:
PREPA	ARED BY		<u>. </u>	National	e. North	itics and	Space A	dininisti	ation					UNITS		
				Aerophy	I Space I sice and y 23, 19	Astroph	onter, Activates Br	eroballis anch, II	tics Divi untsville	sion , Alaban	ıa.		me	ters/sec	ond	
Alt.	Ext.	Pct.		renrual			TIVE P	ERCENT	AGE FR	EQUENC	CY			Ext.	Pct.	Alt.
(MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL) km
afc	- 4.0	0.48		- 2.1	- 1.5	-0.2	0.8	2.8	3.5	4.2	4.9	5.6	9, 1	10.0	0,16	sfc
1	- 9.0	0.16		- 5.0	- 2.1	-0.6	-0.0	0.9	1.7	2.8	3, 7	4.9	10.1	11.0	0.16	1
2	-11.0	0.16	·	- 7.3	- 4,6	-0.6	0.6	3.2	7.6	8.8	13.1	14.0	0.16	2		
3	-17.0	0.16		-10.2	- 5.8	-0,5	2, 2	5.8	12.7	15.6	23,1	24.0	0.16	3		
4	-18;0	0.16	•	-10.2	- 3.2	1.1	4, 4	9.0	18.4	21.2	27. 1	28.0	0.16	4		
5	-19.0	0.16		-10.6	- 2.0	2. 8	6.7	11.2	13.6	23, 3	26.6	45, 1	46.0	0,16	5	
. 6	-18.0	0.16		-11.7	- 2, 7	4.0	7.8	12.9	15.8	21,3	25.9	30.6	47.1	48.0	0.16	6
7	-35,0	0.16		-13.8	- 2.4	5.6	9.2	14.1	18.0	24,1	29.3	36.8	51,1	52.0	0, 16	7
8	-18.0	0.32		-12.3	- 2.7	7. 1	11.2	15.8	20.5	26.3	31.9	35.8	63.1	64.0	0.16	8
9	-23.0	0,16		-13.0	- 2.6	8.7	13.3	19.0	22.8	28.4	33.4	37.9	59.1	60.0	0.16	9
10	-23.0	0.16		-14.5	- 1.9	10.7	15.3	20.5	23.5	30.3	34.3	38.9	47.1	48.0	0.16	10
11	-24.0	0.16		-12.0	- 0.5	12.5	17,0	22.4	25.6	30.3	36.9	38.8	44.5	45.0	0.32	11
12 .	-25.0	0.16		-12.0	1.0	13, 2	18.3	23.3	26.2	30.6	33.8	37.9	41.1 38.1	42.0 39.0	0,16	12
13	-26.0	0, 16		-12.1	3.5	13.9	18,8	22.9	25.7	29.1	32.7 29.1	34.7 32.8	38.1	39.0	0.16	14
14	-24.0	0.16 0.16		-11.0 - 7.0	4. 3 4. 4	14.1 11.9	17.8 15.6	21.6 19.2	24, 1	27,0	26.4	28.2	31.1	32.0	0.16	15
15 16	-22,0 -19,0	0.16		- 6.7	3.3	9.5	12.7	16.2	18.0	20.1	23.4	26.9	29.1	30.0	0,16	16
17	-19.0	0.16		- 4, 4	1, 2	6.8	9.3	12, 4	13.9	16.2	18.8	20.9	30.1	31.0	0,16	17
18	-13.0	0.16		- 4.8	-0.3	4. 1	6. Z	8.5	10.2	12,1	14.3	16.2	22.1	23.0	0, 16	18
19	-10.0	0, 16		- 5, 7	-1.9	2.0	3.5	5. B	7.0	8.7	11. Z	13.9	15.8	16.0	0,81	19
20	-15.0	0. 16		- 6, 2	-2,6	0.5	2. 2	4.3	5.5	7.4	8.8	10.9	16.1	17.0	0.16	20
21	-13.0	0.16		- 6,1	-2, 1	-0.0	1, 3	3, 4	4.8	6.0	7.5	9.4	11,5	12,0	0.32	21
22	-13,0	0.16		- 7.5	-3, 7	-0.1	1.5	3.3	4.4	5.8	6.9	8.5	9.7	10.0	0.65	22
23	- 9.0	0.16		- 7.9	-3. 2	0, 1	1,7	3.7	4.8	6.5	8.3	9.2	9.8	10.0	1. 29	23
24	- 8.0	0.65		- 7.7	-3.5	0.2	2, 3	4. 9	6.0	7.7	10.1	12.2	18.1	19.0	0.16	24
25	- 9.0	0.65	'	- 7.3	-3.9	0.7	2. 9	6.0	7.2	9.3	11.3	13.8	17.1	18.0	0, 16	25
26	-11.0	0.32		- 8.5	-2, 1	1.6	4, 2	7.5	9.2	11.8	13.8	15.6	18, 1	19.0	0,16	26
1		0.65	l	- 8.6	-2.5	2.4	5.9	9.1	11.4	14.5	16.9	19.6	24, 1	25.0	0.16	27

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

																4
		-	TABL	E II-12	DISTRI	BUTION	OF ZON	IAL WIN	DS .	,			ZONAL V	WIND DIS	TRIBUT	ION
STATI						. CALIF	ORNIA					s	ANTA M	ONICA, (CALIFO	RNTA
	ON ELE			NOVEM		meters	Met		٠.			-				
SIMIL	ON EBE	VATION.		123 1880	. 01 38.1	meter s	MJL							NOVE	(BER	
STATI	ON COO	RDINATE	ES:	34.01 d	eg N, 11	8. 27 deg	w							_ '		
PERIO	D OF O	SERVAT	TION:						-April 1 -Decemb		960			compone		
DATA	SOURCE	:		N	O, OF O	BS. FOR		EVEL								
PREP	ARED BY	7:	·			h Carolin utics and		dminist	ration					UNITS		
,		•		Aerophy	sics and	Astroph			tics Divi untsville		1 A		m	cters/sec		
Alt.	Ext.	Pct.		rgurua	y 23, 19		ATIVE F	ERCENT	AGE FR	EQUEN	Y			Ext.	Pct.	Alt.
(MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97,72	99.0	99.865	Speed	Freq.	(MSL) km
€fc	- 5.0	0.33		- 3.4	-2, 8	-0,6	-0.1	1.8	2.6	3.7	4.6	5.5	14.1	15.0	0.17	efc
1	-11.0	0.17		- 6.0	-2.0	-0.5	0.0	1.4	2.0	3.0	4.8	8, 0	15,1	16.0	0.17	1
Z	-19.0	0,17		- 8.0	-4.5	-0,6	0.8	3.1	4.4	6.3	8.8	11.6	20.1	21.0	0.17	2
3	-18.0	0.17		- 8.4	-4.4	0.3	3.1	6.4	14,1	16.7	21.1	22,0	0.17	3		
4	-30.0	0.17		- 8.4	-3,1	2.0	5.4	10,1	12.0	19.0	22.0	29.1	30,0	0.17	4	
5	-19.0	0.17		-10.9	-3.9	3. 2	7.6	12.6	15.1	23.7	29.0	42.1	43.0	0.17	5	
6	-19.0	0.17		-10.1	-2.4	4.8	9.9	15. 4	29.3	32.0	51.1	52.0	0.17	6		
7	-19.0	0.1,7		-12.8	-2.9	6.5	11.8	18. 2	22.4	34.7	40.5	45. 5	46.0	0.33	7	
8	-25.0	0.17		-12, 4	-1.4	8.9	13.8	20.8	37.1	41.3	52, 1	53.0	0,17	8		
9	-28,0	0.17		-13.8	-1.8	10.9	16.2	23.7	39.4	43, 6	49.1	50,0	0.17	9		
10	-23.0	0.33		-12.2	-0,4	12, 3	18.8	28.3	32,2	37.8	41.4	45.0	52. 1	53.0	0.17	10
11	-21.0	0,33.		-13.9	1.2	13.5	20.6	29.8	33.2	38.8	43,6	53.0	60.1	61.0	0.17	11
12	-18.0	0.17		-11.9	2.4	14, 2	22.0	29.8	33,1	38.5	43.3	52, 0	64.1	65.0	0.17	12
13	-22.0	0.17		- 6.8	3.0	14.9	21.2	28. 4	31.5	35,8	40.0	43.0	54, 1	55.0	0,17	13
14	-23.0	0.17		- 6,5	3, 1	14,1	20.0	27.6	30.6	34,0	36.4	37.8	54, 1	55,0	0,17	14
15 16	-22.0 -16.0	0.17		- 7.8	2.8	13.1	18.2	23.5	26.7	29,6	31.4	35.3	43.1	44.0	0.17	15
16	-16.0	0.17 0.17		- 5. 2 - 5. 5	2.3	11.7 8.9	15.9	19.9	22, 1 18, 5	24.1	27. 2 23. 0	28,7	36, 1	37.0 30.0	0.17	16
18	-11.0	0.17		- 5.1	-0,3	6.5	9.3	13, 3	18.5	18.0	19.6	22.3	29. 1 27. 5	28.0	0.17	18
19	- 9.0	0,17		- 6.1	-1.6	4.4	7.1	10.2	12.5	14.8	17, 1	20.5	25, 1	26.0	0.33	19
20	-13.0	0, 17		- 7.3	-2. 7	2.8	5.7	8.9	10.6	12.6	15.8	17.7	22, 1	23.0	0.17	20
21	-13.0	0.17		- 8.9	-2. 2	2.0	5, 1	8.4	9.9	12.3	14, 4	15.7	18.1	19.0	0.17	21
22	-13.0	0.33		- 8.6	-3.8	1,8	5. 2	8.3	9.7	12.0	14.6	16.0	18,1	19.0	0.17	22
23	-15.0	0, 33		- 8,3	-3.6	2.1	5, 8	9. 2	10.7	13.6	16,4	20,0	22,5	23.0	0, 33	23
24	-16.0	0.33		- 9.1	-3,5	2.8	6.4	10.4	12,3	15, B	19.0	22,0	25.5	26.0	0.33	24
25	-15.0	0.33		-10,7	-3, 4	3, 4	7.8	11.8	14.7	18,0	21.4	23.0	32, 1	33.0	0,17	25
26	-22.0	0.17		-11.2	-2, ì	5, 1	10.0	14.5	17.0	21,3	24.5	27.0	32.5	33.0	0.33	26
27	-21.0	0.17		-13.8	-2.2	6,5	11.5	17, 1	19.7	24.2	27.5	30.3	34.1	35.0	0.17	27
					_	, -	L								L	I

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.28 and/or 0.135 cumulative percentage frequency, the speed associateβ with the cumulative percentage frequency exceeded was not determined.

		•	TABL	E \$ -13	DISTRI	витіби	OF ZON	AL WIND	98			2	ONAL W	'IND DIS'	TRIBUT	ION
STATE	ON:	ERIOD:		SANTA		CALIF	ORNIA.					5.4	ANTA MO	ONICA, C	ALIFOR	INIA
	ON ELEV					meters !	MSL							DECEM	BER	
STATI	ON COOF	DINATE	CS:	34.01 de	g N, 110	8. 27 deg	w									
PERIO	D OF OB	SERVA1	NOI:	Long Be Santa M	ach, Cal onica, C	ifornia alifornia	January April	1, 1956- 18, 1956	-April 17 -Decemb	, 1956 er 31, 1	960		tive for a			
DATA	SOURCE	:			Weather E	r Record	s Center	,				N	O, OF OE	35. FOR 620	EACH L	EVEL
PREPA	RED BY	·:		National	Aerona	Carolin	Space A	dminietz	ation	-1		+-		UNITS:		
			-	Aerophy	Space l sics and y 23, 19	Flight Ce Astroph 62	nter, A	anch, H	intsville.	Alabam	18.		me	ters/sec	and	
Alt.	Ext.	Pct.					TIVE P	ERCENT	AGE FR	EQUENC	Y			Ext.	Pct. Freq.	Alt. (MSL
(MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	68.0	84. i	90.0	95.0	97.72	99.0	99.865	-		km
síc	- 4.0	0.32		- 3, 4	-2.7	-0.7	-0.1	1,2	3,5	4.7	7.1	8.0	0, 16	sfc		
ı	-14.0	0.16		- 8.7	-3.1	-0.8	-0.2	1, 1	5.3	6.9	10.1	11.0	0.16	'		
2	-15.0	0.32		- 9.2	-5.8	-0.7	0.6	3.4	9.4	10.9	16.1	17,0	0.16	,		
3	-17.0	0.32		-12.7	-5.8	-0.0	. 2.9	5.9	14.4	17.6 24.9	23.1 45.1	24.0 46.0	0.16	3		
4	-23.0	0.16		-11.2	-4,5	1.7	5. 2	9.3	19.3 24.3	29.8	46.1	47.0	0, 16	5		
5	-20.0	0.16		-12.7	-3.3	3, 6 4, 9	7.5 9.4	11.8	15.0 17.8	19.5 23.6	28. 2	33.9	55.1	56.0	0,16	6
6	-24.0 -28.0	0.16	l	-13. B	-4.9 -3.6	6.4	11.6	16.9	20.7	27.0	31.9	36.4	51.1	52.0	0, 16	,
8	-34.0	0.16		-17.7	-3.7	7.7	13.5	20.6	24.0	30,2	36, 4	41.2	54.5	55.0	0,32	8
9	-25.0	0.16		-16.0	-3, 8	9. 2	15.4	24.6	28.5	34,3	41.9	50.8	60:1	61,0	0, 16	9
10	-31.0	0.16	l	-19.0	-2.8	11,5	18.4	28.0	33.0	37.5	44. 4	57.8	74.1	75.0	0.16	10
11	-25.0	0.16		-16.7	- 9 .9	14.0	21.9	31.8	35.6	42,5	49.6	63,8	71.5	72.0	0, 32	11
12	-25.0	0.16	ł	-11.6	1.6	16.5	22, 7	31.9	36.4	43.0	52, 9	57.4	75.1	76.0	0,16	12
13	-23.0	0.16		- 5, 4	3.4	16.3	22. 4	29.9	34,0	41.7	46.9	51.9	61.1	62.0	0,16	13
14	- 8.0	0.16		- 2.3	5.3	16,3	21.1	27.6	31.0	35,0	37.9	42.6	49.1	50.0	0.16	14
15	-10.0	0.16		- 2.7	4.9	15.0	19.4	24. 2	26.5	30.8	33, 6	36.4	43.5	42.0	p. 32	15
16	- 8.0	0,32		- 1.4	3, 9	12,6	16.7	20,8	24.0	27.2	29.6	31.9	35.1	36.0	D. 16	16
17	- 7.0	0, 16	1	- 2, 2	1.9	9.7	13.2	17.0	19.2	22.0	26. 4	28.9	31.1	32.0	0.16	17
18	- 6.0	0.48	1	- 4,6	-0.0	7.0	10.0	13.5	15.3	18.8	22. 2	26,2	28.7	29.0	0.48	18
19	-12.0	0.32		- 5.0	-0,9	3.8	7.0	10,1	11.9	15.3		20, 2 16, 2	26.1	27.0	0.16	20
,20	-13.0	0.16	l	- 7.4	-2.6	1.3 0.0	3.9 2.3	7. 5 5. 9	9.4 8.1	12.0 10.7	13.8	15.9	20.1	19.0	0.16	21
3 22	-17.0 -15.0	0.16		- 9.5 -11.7	≥4.8 -5.5	-0.5	1.5	4.6	6.9	10.1	11.9	14.8	19.1	20.0	0.16	22
23	-1,6.0	0.48		-12, 8	-6.9	-0.6	1.4	4.7	6.4	9.0	11.9	16.4	, 23 .1	24.0	0, 16	23
24	-19.0	0.32		-12.2	-7.7	-0.5	1.7	5, Z	6.6	10.1	13.6	17.8	25.1	26.0	0,16	24
25	-30.0	0.16	1	-14.3	-7.2	-0.1	2.6	6.3	8, 3	10.8	14.1	16.6	28.1	29.0	0.16	25
26	-24,0	0.16		-16.5	-8.8	0.8	4.4	8.5	10,8	13.6	16.4	20.8	29.1	\$0.0	0, 16	26
27	-21.0	0.81	l	-17.5	-7.0	1.8	6.0	10.8	13.4	16.1	19.9	22.9	29.1	30.0	0.16	27

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

Page

Distribution of Meridional Winds (Positive for wind component from the south) (Negative for wind component from the north) Unit: meters per second Table III-2 January 45 Table III-3 February..... 46 Table III-4 March 47 Table III-5 48 Table III-6 May 49 Table III-7 June 50 Table III-8 July 51 Table III-9 August..... 52 Table III-10...... September..... 53 Table III-11...... October 54 Table III-12....... November...... 55 Table III-13..... December 56

TABLE III

4																
	-	T	ABLE III	l-1 DI	STRIBU'	TION OF	MERID	ONAL W	INDS			MEF	IDIONAI	L WIND I	ISTRIB	UTION
STATIO	ON: LENCE P	ERIOD		SANTA B		CALIF	ORNIA					SA	NTA MC	NICA, C	ALIFOR	NIA
	ON ELEV			125 feet		meters h	ASL							ANNUA	L	
STATIO	ON COOR	DINATE	S:	34.01 de										· 		
PERIO	D OF OB	SERVAT	ION:	Long Be-	ach, Cali onica, Ca	fornia difornia	January April	1, 1956- 18, 1956-	April 17 Decemb	, 1956 er 31, 1	960			compone		
DATA	SOURCE	:		National U.S.W			Center					NO	o, of or	3S, FOR 7308	EACH L	EVEL:
				Ashevill National	e. North	Carolin	Space A	deniniatr	ation					UNITS:		
PREPA	RED BY	:		Marshal Aerophy	Space F	Hight Co	nter. Ac	roballist	tics Divi	ion Alabam	a.	1	m	eters/sec		
	<u> </u>			Februar	y 23, 194	52		ERCENT						Ext.	Pct.	Alt.
Alt. (MSL)	Ext. Speed	Pct. Freq.	0.135	2.28	15.9	50. O	68.0	84,1	90.0	95.0	97.72	99.0	99. 86 5	Speed	Freq.	(MSL) km
km efc	-15.0	0.03	-11.9	- 4,3	- 1.2	-0.3	0.1	1.3	1.8	3.1	3,8	5.8	15.0	0.01	sfc	
1	-22.0	0.01	-16.9	- 8.4	- 2.1	-0.5	-0.0	1.2	1.9	4.6	6.9	12.3	18.0	0.01	1	
2	-27.0	0.01	-20.8	-10.0	- 4.3	-0.5	0.7	2.8	4.1	7.9	10.2	14.3	23.0	0.03	Z	
3	-38.0	0.01	-26.9	-15.8	- 6.4	-0.5	1.6	4.6	6.4	11.5	14.4	19.5	27.0	0.01	3	
4	-47.0	0.01	-29.6	-17.0	- 8.8	-0.5	2.2	5.8	7.9	14.4	17.5	24.6	33.0	0.01	4	
5	-56.0	0.01	- 36.8	-21.9	- 9.7	-0.4	2.6	6.6	9.0	16.7	20.3	26.0	39.0	0.01	5	
6	-64.0	0.01	-46.8	-23.0	-10.5	-0.3	3.1	7.5	10.1	13.9	19.4	23.0	31.5	37.0	0.01	6
7	-76. ď	0. 1	-50.4	-27.8	-11.7	-0.3	3.5	8.4	11.4	15.9	21.6	26,5	38.0	51.0	0.01	7
.8	-79.0	0.01	-54.9	-30,2	-12.5	-0.1	4.3	9.8	13.1	18.9	24.5	29.6	38.7	55.0	0.01	8
9	-73.0	0.01	-57.9	-34.9	-13.3	-0.0	5.1	11.2	15.3	21.1	26.9	32.6	44.0	54.0	-0.01	9
10	-63.0	0.01	-54.4	-36.5	-14.2	0.1	5.8	12.8	16.8	22.8	28.6	33.2	46.1	64.0	0.01	10
11	-68.0	0.01	-53.5	- 36.9	-14.1	0.2	6.7	14.0	18.8	23.8	29.5	33.7	45.0	57.0	0.01	11
12	-63.0	0.01	-51.9	-33.9	-12.0	0.8	7.0	14.2	18.3	24.0	28.2	33.1	42.8	57.0	0.01	12
13	-63.0	0.01	-45.9	-29.5	-10.3	1.3	6.9	13.6	17.3	21.9	26.2	29.6	37.6	49 .0	0.01	13
14	-46.0	0.03	-43.9	-25.8	- 8.1	1.3	6.2	11.8	15.1	19.3	22.9	25.8	33.7	40.0	0.04	14
15	-39.0	0.01	-34.9	-20.9	- 7.5	1.0	4.9	9.3	12.0	15.8	18.9	22, 1	30.2	36.0	0.01	15
16	-32.0	0.03	-28.7	-16.1	- 6.5	0.5	3.6	7.2	9.1	11.9	14.8	17.5	23.4	30.0	0.01	16
17	-26.0	0.01	-23.9	-13.3	- 5.6	-0.1	2.3	5.2	6.6	8.9	11.0	13.0	20.0	31.0	0.01	17
18	-23.0	0.01	-18.2	-11.3	- 4.1	-0.4	1.1	3.4	4.7	6.5	8.2	10.0	16.3	32.0	0.01	ł
19	-19.0	0.01	-15.3	- 9.3	- 4.6	-0.6	0.4	2,2	3.2	4.7	6.2	7.8	15.0	30.0	0.01	1
20	-21.0	0.01	-15.8	- 8.7	- 3.1	-0.7	0.0	1.5	2.4	3.7	5.2	6.7	11.8	17.0	0.01	1
21	-21.0	0.01	-13.7	- 7.1	- 3.4	-0.7	-0 _: 1	1.1	1.9	3.0	4.4	5.8	10.0	14.0	0.03	
22	-20.0	0.01	-13.1	- 7.2	- 3.4	-0.7	-0.1	0.9	1.8	2.9	4.3	5.7	10.5	14.0	0.01	1
23	-15.0	0.03	-12.1	- 7.2	- 3.5	-0.8	-0.1	0.9	1.7	2.9	4.5	6.3	12.1	18.0	0.01	
24	-16.0	0.07	-13.2		- 3.4	-0.8	-0.1	0.9	1.8	3.1	5.1	7.3	11.4	16.0	0.01	
25	-20.0	0.01	-14.5	1	- 3.3	ł	-0.1	1.1	1.9	3.3	4.9	7.4	12.3	15.0	0.01	1
26	-24.0	0.01	-15.1	- 9.8	- 3.0	-0.8	-0.1	1.2	2.2	3.7	5.7	7.8	12.0	17.0 20.0	0.01	
27	-27.0	0.01	-18.4	- 9.4	- 4.8	-0.8	-0.1	1.5	2.6	4.2	6.5	9.4	14.8	20.0	0.01	<u> </u>

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.2f and or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

		T.	ABLE II	I- Z D	ISTRIBU	TION OF	MERIO	IONAL V	VINDS			MEI	RIDIONA	L WIND	DISTRIB	UTION
STATI	ON: RENCE F	PERIOD:		SANTA I		, CALIF	ORNIA					5/	ANTA MO	ONICA, (CALIFOR	RNIA
STATI	ON ELE	ATION:		125 feet	or 38.1	meters	MSL							JANUA	RY	
STATI	ON COOL	RDINATE	SS:	34.01 de	g N, 111	8 . 27 d eg	w									
			·													
PERIO	D OF OE	SERVAT	TION:	Long Be Santa M			compone									
DATA	SOURCE	:		National U. S. W			No	O, OF O	BS. FOR	EACH L	EVEL:					
PREP	ARED BY	':		Ashevill National			620 UNITS:									
		•		Marshal	l Space I sics and	Flight Co Astroph	inter, A	eroballis ranch, H	tics Divi		ıa		m	eters/se		
Alt.	Ext.	Pct.		rebruar		CUMUL	Y			Ext.	Pct.	Alt.				
(MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL) km
sfc	-10.0	0.16		- 6.3	- 2.3	-0.7	-0.3	- 0.0	0.6	1.5	2.2	3.6	8,1	9.0	0.16	sfc
1	-16.0	0.16		- 8.0	- 3.5	-0.4	0.2	1.8	3.0	7.7	9.9	17.1	18.0	0.16	1	
2	-19.0	0.16		-11.0	- 5.0	-0.8	0.9	12.2	20.1	21.0	0.16	Z				
3	-31.0	0.16		-16.3	-10.9	-1.3	1.5	5.1	12.9	16.2	25.1	26.0	0.16	3		
4	-33 0	0.16		-20.0	-12.7	-2.9	2.1	6.7	16.9	19.4	30.1	31.0	0.16	4		
5	-39.0	0.16		-25.0	-14.9	-1.0	2.6	8.1	19.6	23,2	27.1	28.0	0.16	5		
6	-44.0	0.16		-27.0	-15.1	-2.5	3.5	9.3	21.6	24.8	. 33.1	34.0	0.16	6		
7 8	-54.0 -50.0	0.16 0.16		-33.0 -37.1	-17.8 -19.5	-1.7 -0.7	4.1 5.0	10.2	30.8	29.6 32.6	33.1	34.0 38.0	0.16	8		
9	-65.0	0.16		-37.1 -40.1	-19.5	-0.4	5.9	13.8	36.9	44.1	45.0	0.16	9			
10	-55.0	0.32		-41.7	-24.0	-0.2	6.4	14.4	21.0	26.8 27.5	33.2	34.8	40.1	41.0	0.16	10
11	-68.0	0.16		-45.1	-24.2	-0.7	6.6	16.4	21.8	27.1	31.5	33.7	38.1	39.0	0 16	11
12	-58.0	0.16		-43.0	-23.7	-0.9	6.1	15.3	20.5	24.5	26.9	30.4	36.1	37.0	0.16	12
13	-51.0	0.16		-40.0	-17.0	-0.8	5.5	13.8	17.5	21.1	25.4	27.4	32.1	33.0	0.16	13
14	-45.0	0.16		- 32.0	-15.3	-0.7	5.2	11.4	15.7	19.2	22.4	24.8	28.5	29.0	0.32	14
15	-35.0	0.48		-29.2	-12.0	-0.8	3.5	8.9	12.4	17.3	19.6	21.4	25.5	26.0	0.32	15
16	-32.0	0.16		-25,7	- 9.1	-0.9	3.0	7.3	9.7	13.4	15.3	18.7	29.1	30.0	0.16	16
17	-26.0	0.16		~18.0	- 7.0	-1.5	1.9	5.3	7.8	10.2	11.9	13.9	30.1	31.0	0.16	17
18	-22.0	0.16		-16.5	- 7.0	-1.2	0.1	3.1	5.0	7.7	9.2	10.9	31.1	32.0	0.16	18
19	-18.0	0.16		-13.3	- 7.6	-2.8	-0.3	1.8	3, 3	5.6	6.9	8.4	29.1	30.0	0.16	19
20	-17.0	0.16		-11.3	- 6.8	-2.7	-0.6	0.8	2,4	4 , Ó	5.5	7.2	15.1	16.0	0.16	20
21	-13.0	0, 32		-11.9	- 6.4	-2.8	-0.7	0.5	1.6	3.1	4.9	5.8	9.1	10.0	0.16	21
22	-17.0	0.16		-11.2	- 6.4	-2.5	-0.8	0.1	1.1	2.5	3.5	4.5	6.1	7.0	0.16	22
23	-15.0	0.16		-10.0	- 6.4	-2.2	-1.9	0.1	1.1	2.3	3.6	4.6	7.5	8.0	0.32	23
24	-16.0	0.81		-11.2	- 6.3	-2.4	-0.9	- 0.0	0,8	2,3	4.1	5.7	7.5	8.0	0.32	24
25 26	-20.0	0.16		-12.8	- 6.1	-2.4	-0.7	0.6	1.6	3.1	4.2	5.9	8.7	9.0	0.48	25
26 27	-24.0 -27.0	0.16		-13.0 -15.0	- 7.4 - 7.0	-2.4 -2.2	-0.7 -0.6	2.0	2.5	4,1	5.9 7.8	7.9	10.1 12.1	11.0	0.16	26 27
<u>"</u>	-21.0	0.10		-15.0	- 1.0	-4.2	0.0	2.0	3.8	5.7	1.6	10.3	12.1	15.0	0.16	

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.28 and or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

•	η	T	BLE III	-3 DI	STRIBU	TION OF	MERIDI	ONAL W	INDS			ME	IDIONA	L WIND I	OISTRIB	UTION
TATIO	ON:	•	e en en en en en en en en en en en en en	SANTA I	MONICA	CALIF	ORNIA						 NTA MC	NICA, C	ALIFOR	NT A
EFEF	ENCE P	ERIOD:		FEBRUA	RY							- 57	NIA MC	MICA, C	ALIFOR	MIA
TATI	ON ELEV	ATION:		125 feet	or 38.1	meters h	4SL					L		FEBRUA	RY	
TATE	ON COOR	DINATE	:S:	34.01 de	g N, 115	. 27 deg	W				•	···!		÷		
PERIO	D OF OB	SERVAT	ION:	Long Be				1, 1956- 18, 1956-	April 17	, 1956	760			componer		
DATA	SOURCE			National								NO	o, of or	S, FOR	EACH L	EVE
חות	SOOKOL	•		U. S. W.	eather B	ureau								568		
PREP	RED BY	;		National	Aerona	itics and	Space A	dministr	ica Divi	ion				UNITS:		
				Aerophy Februar	sics and	Astroph	yaics Br	anch, liu	nteville,	Alabam	A		m	sters/see	ond	
Alt.	Ext.	Pct.					TIVE P	ERCENT	AGE FR	EQUENC	Ý			Ext. Speed	Pet. Freq.	Alt.
MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865			km
efc	- 8.0	0.53		- 5.7	- 2.9	-0.5	-0, 1	0,5	2. 9	3.7	6. Z	7.0	0.18	∎fc.		
1	-22.0	0, 18		- 8.1	- 3, 4	-0, 6	-0.0	1.4	8, 6	11.5	16, 2	17.0	0, 18	1		
2	-20.0	0.18	-	-13.9	- 6, 5	-3,0	-0. 1	3.4	11.6	13.1	22, 6	23.0	0, 35	2		
3	-22.0	0, 18		-17.1	- 9.0	-2, ì	-0,0	4, 6	7.1	11.6	14.8	17.7	26. 2	27.0	0,18	3
4	-37.0	0, 18		-21.4	-11.7	-2, 2	0.9	6. 3	9.4	14.1	18.4	20.3	24.7	25.0	0,53	4
5	-48.0	0.18		-25.7	-14, 6	-2, 2	1.8	7, 2	10.8	16.1	19. 2	21.7	26. 2	27.0	0.18	5
6	-49.0	0,18	1	-29.9	-15. 2	-4.0	2. 2	8. 9	20.3	23.4	36, 2	37.0	0.18	6		
7	-64.0	0, 18		-34.9	-17.4	-2. 3	3. 2	10.4	22. 5	27.6	29.7	30.0	0,53	7		
8	-74.0	0.18		-37.6	-20.5	-2, 3	4.2	10.3	15.6	21,6	25, 5	30.7	38. 2	39.0	0.18	8
9 .	-66.0	0.18	l	-41.9	-21, 2	-4,0	4.2	11.4	17.0	23.6	26, 6	35.1	37.6	38.0	0, 35	9
10	-58.0	0,18		-42, 4	-24.0	-4.0	5.0	13.3	18.4	23.9	29.6	33.6	45. 2	46.0	0.18	10
11	-61.0	0.18	ŀ	-46.9	-24.9	-2.0	5.0	13, 2	18.0	23.4	29.5	32.6	38, 6	39,0	0. 35	111
12	-63.0	0,18		-44.9	-22.2	-2.1	5.0	13.0	16.6	21.2	25. 2	29.6	36.6	37.0	0. 35	12
13	-63.0	0, 18		-42, 6	-18.6	-4.0	4.9	11.6	15,5	20.3	22. 8	25, 1	33, Z	34.0	0.18	13
14	-46.0	0, 35		-37.9	16.3	-2.9	4, 3	10.2	12.9	16.3	20.0	22.3	29.6	30.0	0. 35	14
15	-38.0	0,18		-26.4	-14.8	-2. 8	3.6	8, 3	11.1	14.0	16.8	19.5	31.2	32, 0	0.18	15
16	-32.0	0,18	1	-21, 3	-11.2	-1.3	2, 5	6, 6	9.0	11.9	14.1	14.9	18.2	19.0	0.18	16
17	-25.0	0, 18		-17.5	- 9.0	-1.5	1,7	5, 4	7,3	9.6	12.0	13.7	17. 2	18.0	0, 18	17
18	-23.0	0.18		-14, 1	- 8.7	-0.9	0.8	3.9	5,4.	73	9.8	12.4	25, Z	26,0	0, 18	18
19	-19.0	0,18		-12,6	- 6.5	-1.7	0.0	3.0	4,2	5,8	7.8	9,8	18.2	19.0	0.18	19
20	-21.0	0, 1,8		- 8,0	- 5.5	-1.4	-0,2	1.8	3,3	5.5	6. B	8.1	12, Z	13,0	0, 18	20
21	-21.0	0, 18		- 9.7	- 4.0	-1.5	-0, 1	1.7	3.0	4.9	6.6	8.3	12.2	13.0	0.18	21
22	-20,0	0.18	ł	- 8.1	- 4.4	-1,7	-0, Z	1.4	2.9	5.4	7.7	10.4	13. 2	14.0	0.18	22
23	-15.0	0, 18	1	- 7.0	- 4.8	-1,7	-0.3	1.5	3, 1	6.5	9.4	12.0	13.6	14.0	0, 35	23
24	-11.0	0,53		- 8.7	- 4.8	-1.8	-0.3	1.4	4,2	7.1	10.4	12.0	15, 2	16.0	0, 18	24
25	-13.0	0.18		- 9.9	- 4.3	-1.5	-0.4	1.7	4.6	8.6	11,0	12.5	13,6	14,0	0. 35	25
26	-12.0	.0, 35		- 9.1	- 5.6	-1.0	-0.4	2.2	. 6.0	9.3	11.1	13.1	16, 2	17.0	0.18	26
27	-17.0	0,18		-10.9	- 5.0	-2, 8	-0.4	3,5	7,6	10.7	13.0	15.6	19. Z	20.0	0.18	27

NOTE: (i) When the percent frequency of extreme speed exceeded the 2.2f and or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

																47
		т	ABLE II	I-4 D	ISTRIBU	TION OF	MERID	IONAL \	VINDS			ME	RIDIONA	L WIND	DISTRIB	OITU
STATI	ON:	ERIOD:		SANTA	MONICA	, CALIF	ORNIA					S	ANTA MO	ONICA, O	ALIFO	RNIA
STATI	ON ELEV	ATION:	-	125 feet	or 38.1	meters	MSI					T		MAR	СН	
STATE	ON COO	DINATI	. q.	34 01 de	eg N, 110	8 27 dea	w							,		
SIMI	011 0001	(DINA)		74.01 4	og 14, 22		"								,	
PERIO	D OF OF	SERVA	rion:						-April 17 -Decemb		760			compone		
DATA	SOURCE	:		U. S. W	Weather E	lureau		•				N	O, OF O	BS. FOR 620	EACH L	EVE!
PREPA	ARED BY	7 :	·· <u>-</u>	National	le. North LAerona: LLSnace	itics and	Space A		ration tics Divi	sion		1		UNITS:		
				Aerophy	sice and y 23, 19	Astroph	yaica Br	anch, H	untsville	, Alaban	18		m	eters/se	cond	
Alt. (MSL)	Ext. Speed	Pct. Freq.					ı		AGE FR					Ext. Speed	Pct. Freq.	A]t. (M5)
km			0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	4.0	0.14	km
efc 1	-13,0 -16,0	0,16		- 5.0	- 2,9 - 4,3	-0.4 -0.7	-0.1 -0.1	1.2	1.8 2.0	2.6 3.8	3.3 4.9	3. 8 6. 2	5.1 14.1	6.0 15.0	0, 16 0, 16	•fc
2	-23.0	0.16		-13.6	- 6,6	-1.3	-0.2	2.1	3.5	5.1	6.8	8.6	12.1	13.0	0, 16	
3	-3B.0	0.16	ì	-17. 2	- 8, 2	-2, 5	-0.3	2.9	4.7	8.3	10.1	11.2	18,1	19.0	0, 16	
4	-32,0	0.16		-20, 3	-10, 2	-3.7	-0.3	3.0	5.1	7.9	12.9	15.9	28.1	29.0	0.16	
5	-32.0	0.16		-22.5	-11,1	-3.5	-0, 1	4, 1	6.5	10.2	14.7	17.9	26.1	27.0	0.16	,
6	-40.0	Q. 16		-25.0	-13.5	-3.7	-0.0	4.7	7.7	11.5	16.4	21.2	29.1	30.0	0.16	(
7	-45.0	0.16		-26.0	-14.7	-4.0	0.3	5.4	8.1	13.3	19.2	23.9	32, 1	33,0	0.16	.
8	-48.0	0.16		-28.0	-16.4	-3, 8	0.5	6.3	9.6	141.4	19.8	29.8	33.1	34.0	0.16	
9	-50.0	0,16	76.	-32. 1	-17.7	-3.8	0.5	6.9	10.1	15.6	23.9	30.6	35.1	36,0	0.16	'
10	-63.0	0,16		-35, 5	-17.5	-2.9	1.4	7.9	11.3	16.5	22.2	29.8	36.1	37.0	0.16	10
11	-50.0	0,16		-32, 1	-17, 1	-0.9	2.4	8.3	13.2	18.4	23.4	28.8	46, 1	47.0	0.16	11
12	-43.0	0,16		-28. 4	-15.7	-0.8	2.9	8,6	11.3	16.2	21.9	27.8	41.1	42, 0	0,16	11
13	-44.0	0.16		-25.7	-12.5	-0.6	3,3	7.6	10.0	13.5	18.1	21.6	33,1	34.0	0.16	1:
14 ′	-28.0	0.16		-21.3	- 9.3	-0.5	2.8	7.0	9.4	12.0	14.4	18.4	24.1	25.0 23.0	0.16 0.16	1:
15 16	-25.0 -19.0	0.16		-17.7 -15.8	- 8, 2 - 7, 3	-0.6 -0.7	2.3	5. 6 4. B	7. 2 6. 6	9.9 8.6	9.9	17.4	17.1	18.0	0.16	1
17	-21.0	0.16		-12, 3	- 6.2	-0.8	0.5	3.3	4.9	6.4	8.4	10.3	12.1	13.0	0.16]
18	-17.0	0,16		-10.8	- 5,6	-0.9	-0,0	2, 3	3.3	4.8	7.0	7.9	13,1	14.0	0.16	11
19	-17.0	0, 16		- 9.7	- 5, 8	-1.6	-0.2	1,4	2.5	3.6	5.4	6.7	8.5	9.0	0.32	1,
20	-11.0	0, 16		- 7.8	- 4.6	-1.6	-0.2	1,5	2.4	3.5	4.5	5.7	7.5	8.0	0, 32	20
21	-13.0	0, 16		- 6.5	- 3.0	-1.6	-0.3	1, 1	2.0	3.4	4,6	5.7	6.8	7.0	0.81	2
22	-12.0	0.16		- 6.0	- 3, 0	-1.8	-0, 3	0.8	1.9	3.7	5.2	6. 3	8,1	9.0	0, 16	22
23	-11.0	0. 16		- 7.8	- 3, 2	-1.7	-0.4	0.7	2.1	4.1	6.3	7.6	11.1	12.0	0.16	2:
24	-12.0	0.48		- 6.3	- 3.3	-1.9	-0.2	1,2	2.6	4.5	5.9	7.7	9.5	10.0	0.32	2
25	-12.0	0.16		- 7.5	- 3, 4	-0.8	-0.0	1.6	2.5	3.8	5.4	6, 7	11.1	12.0	0.16	25
26	-12.0	0, 16		- 8, 3	- 3, 1	-1.9	-0.2	1.4	2.5	4.0	5.5	6.5	10.1	11.0	0.16	26
27	-13.0	0.16		- 9.8	- 3.0	-1.8	-0.2	1,6	2.8	4.3	5.9	7.8	12,1	13.0	0, 16	27

NOTE: (i) When the percent frequency of extreme speed exceeded the 2.28 and or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

v.		T.	ABLE II	1-5 D	ISTRIBU	TION OF	MERID	IONAL W	INDS			MEI	RIDIONA	L WIND	DISTRIB	UTION
STATIO	ON:	tolon.		SANTA I	MONICA,	CALIF	ORNIA	·· · · · · · · ·				5/	NTA MO	ONICA, C	ALIFOR	NIA
	ON ELEV				or 38.1	meters	MSL							APRIL		
					•••					<u> </u>				APRIL		
STATI	ON COOL	DINATE	ES:		ig N, 11f	. 27 deg	W									
PERIO	D OF OB	SERVAT	rion:					1, 1956- 18, 1956			760		tive for c			
DATA	SOURCE	: ,			Weather		• Center			· · · · · · · · · · · · · · · · · · ·		NO	o, or or	S. FOR	EACH L	EVEL:
				Ashavill	eather B e. North	Carolin								600		
PREPA	RED BY	1		Marchal	I Subce I	Maht Ca	inter. Ai	dministr roballis	LICA IJIVI	aion				UNITS:		
				Aerophy Februar	y 23, 19	62		anch, Ho					m	eters/se	-	
Alt. (MSL)	Ext. Speed	l ³ ct. Freq.				CUMULA		ERCENT						Ext. Speed	Pct. Freq.	Alt. (MSL)
km	Micca		0.135	2.ZR	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865			km
•fc	-13.0	0.33	•	- 4.2	- 1.7	-0.2	0.5	1.8	2.4	3.0	3, 9.	5.0	7.5	8.0	0.33	#fc
1	-20.0	0.17		-10.5	- 3.3	-0.6	-0.0	1.3	2.3	3.8	5.9	9.0	14.1	15.0	0.17	,
. 2	-21.0	0.17		-12.3	- 4.0	-0.9	-0.0	2.6	4.5	7.2	9.2	11.0	18.1	19.0	0.17	2
3	-28.0	0.17		-14.2	- 7.7	-1.0	0.1	4.0	6.2 7.7	9.7 12.0	11.8	14.5	17.5	18.0	0.33	3
4	-41.0	0.17		-17.6	- 8.1	-2.5	0.2	4.9	14.8	17.6	23.1	24.0	0.17	4		
5	-50.0	0.17		-20.8	-10.3	-Z.3	0.1	5.1	19.3	22.0	25.1	26.0	0.17	5		
6 .	-46.0	0.17	l .	-24.8	-12.9	-2.1	0.4	6.0	21.8	25.5	32.5	33.0	0.33	6		
7	-50.0	0.17		-27.3	-13.8	-3.B	0.4	6.2	12.0	19.5	25.4	30.0	42.1	43.0	0.17	7
8 .	-55.0	0.17		-29.1	-13.0	-3.4	0.7	6.6	13.2	22.7	27.3	38.0	44.1	45.0	0.17	8
9	-60.0	0.17		-33.6	-16.7	-3.4	1.0	7.3	14.0	22.8	30.4	38.0	53.1	54.0	0.17	9
10	-58.0	0.17		-36.5	-16.2	-3.4	0.7	7.9	14.0	24.6	29.4	42.0	63.1	64.0	0.17	10
11	-46.0	0.17		-35.6	-17.3	-4.0	1.3	8.6	14.7	24.0	33.3	39.0	55.1	56.0	0.17	11
12	-46.0	0.17		-32.8	-15.0	-1.0	2.1	7.9	12,5	22.0	29.7	37.0	56.1	57.0	Q. 17	12
13	-37.0	0.17		-28.5	-12.8	-0.9	2.5	7.6	11.5	18.0	24.1	32.0	42.5	43.0	0.33	13
14	-35.0	0.33		-25.4	- 9.1	-0.5	2.7	7.3	9.7	13.8	20.4	24.6	35.1	36.0	0.17	14
15	-32.0	0.17		-22.2	- 7.0	-0.3	2.5	6.2	8.0	12.2	18.0	25.0	30.5	31.0	0.33	15
16	-28.0	0.17		-19.3	- 6.1	-0.5	2.1	5.3	7.0	9.7	13.0	16.5	23.1	24.0	0.17	16
17	-21.0	0.17		-14.1	- 5.7	-0.4	1.6	4.5	6. 1	7.9	10.7	15.0	21.5	22.0	0.33	17
18	-17.0	0.33		-11.0	- 4.4	-0.4	1.0	3.9	5, 3	7.6	9.8	12.0	17.5	18.0	0.33	18
19	-13.0	0.33		- 9.6	- 4.9	-0.5	0.8	3.2	4.3	6.0	7.9	10.5	15.7	16.0	0.50	19
\$ 0	-10.0	0.17		- 6.0	- 3.4	-0.5	0.4	2.1	3.2	4.8	7.7	11.5	14.1	15.0	0.17	20
21	-10.0	0.17		- 6.4	- 2.0	-0.6	-0.0	1.7	2.6	4.1	5.9	9.5	12.5	13.0	0.33	21
22	- 9.0	0.17		- 6.4	- 3.8	-0.6	0.0	1.6	2.3	3.5	4.9	10.0	12.5	13.0	0.33	22
23	- 9.0	0.17		- 6.5	- 3.8	-0.7	-0.0	1.3	2.1	3.9	5.7	8.0	14.1	15.0	0.17	23
24	- 9.0	0.50		- 6.5	- 3.9	-0.7	-0.0	1.6	2.7	4.4	6.7	9.0	10.5	11.0	0.33	24
25	-10.0	0.17		- 6.2	- 3.7	-0.8	-0.0	1.8	3,0	4.1	6.5	9.0	11.1	12.0	0.17	25
26	-14.5	0.17	1	- 7.9	- 3.6	-0.5	0.4	2.2	3.6	5,6	7.2	9.5	11.5	12.0	0.33	26
27	-18.0	0.17		- 7.3	- 3.9	-0.5	0.3	2.8	4.2	5.8	7.3	9.0	16.1	17.0	0.17	27

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.28 and or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

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		T	ABLE II	I-6 I	estribu	ITION O	F MERIC	DIONAL V	VINDS			ME	RIDIONA	L WIND	DISTRIB	UTION
STATI REFE	ION: RENCE I	PERIOD:	7	SANTA MAY	MONICA	CALIF	ORNIA					S	ANTA M	ONICA, (CALIFO	RNIA.
STATI	ON ETE	VATION:		125 feet	or 38.1	meters	MSI.			:				МАЧ		
STATI	ON COO	RDINATI	ES:	34.01 d	og N, 11	8.27 deg	w	-								
PERIO	O OF O	SERVA	TION:	Long Be Santa M	ach, Cal	lifornia California	January April	1, 1956 18, 1956	-April 1 -Decemi	7, 1956 ber 31, 1	960			r compon		
DATA	SOURCE	: ·		U. S. W	eather I	r Record						N	O, OF O	BS, FOR 620	EACH L	EVEL:
PREPA	ARED BY	r :		Nationa Marsha Aerophy	l Aerona Il Space	utics and Flight Co LAstroph	Space /	dministr eroballis ranch, H	tics Divi	ielon , Alabair	18		· m	UNITS:		-
Alt.	Ext.	Pet.					ATIVE P	ERCENT	AGE FR	EQUENC	Y			Ext.	Pet.	Alt.
(MSL) km	Speed	Freq.	0. 135	2.28	15.9	50.0	68.0	84, 1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL) km
efc	- 6.0	0.16		- 2,0	- 0.9	0.0	0.9	1.9	2.5	2.9	3.7	4.2	8,1	9.0	0.16	afc
1	-16.0	0.16	•	- 7.5	- 2,3	-0.5	0.0	1.3	2.0	2.8	3, 8	4.8	7.7	8.0	0, 48	ı
2	-16.0	0.16		- 9.0	- 4.5	-0.5	0, 8	3.3	4.8	6.5	7. 8	8.9	10.5	11.0	0.32	2
3	-15, 0	9 . 16		-11.5	- 5.5	-0.4	2. 1	6.2	14. 2	15.5	19.1	20.0	8,16	3		
4	-23. D	0.16		-14.0	- 7.7	-0.4	2.8	7.8	17.4	10.8	22, 1	23.0	0, 16	1		
5	-25.0	0.16	ł	-15.0	- 8.2	-0.2	3.4	8.8	20.9	22.9	31,1	32,0	0, 16	5		
6	-29.0	0 32	ł	-21.0	-10.8	-0.2	3.8	9.9	23, 5	26.9	33.1	34.0	0.16	6		
7	-35.0	0.14	l	-24, 5	-11.3	-0,1	4.9	11.4	16.8	22.0	26.4	29.6	42.5	43.0	0, 32	'
8 9	-41.0	0.16	-	-25, 3	-12, 4	-0.1	5,1	13.0	18.5	23.4	26.9	29.9	54.1	55.0	0, 16	•
10	-43.0 -46.0	0.16		-30.5 -30.5	-13, 3	0.1	6.4	14.6	19.1	25.5	30, 2	35.4	52, 1	53.0	0.16	, ,
11	-41.0	0.16		-29.0	-15.6	0.2	7.1	14, 4 15, 6	19.3	25.0 26.8	31.9 33.9	37.9 39.8	53. 1 52. 1	54.0 53.0	0.16	10
12	-35.0	0.32		-26,0	-12, 6	0.7	6.8	14.8	20.0	26.2	31.9	36.8	42.7	43.0	0.48	12
13	-27.0	0.32		-20.0	- 9.4		6.9	13.7	19.5	24.7	28.3	31.4	40.1	41.0	0.16	13
14	-26.0	0.16		-16.8	- 7.3	1, 2	5.8	12.3	16.6	21.8	24.4	25.9	38.1	39.0	0.16	14
15	-18.0	0.16		-13.7	- 5.5	1.3	5.0	10.7	13.7	16.7	20. 2	21.9	32, 1	33.0	0.16	15
16	-15.0	0.16		-10.4	- 3.0	1.4	4.6	9.0	10.4	12.8	15. 4	18.9	23.1	24.0	0.16	16
17	-12.0	0.16		- 6.0	- 2.3	0.9	3.6	6.3	8.2	10, 2	11.7	13.9	21.1	22.0	0.16	17
18	-11.0	0, 32		- 5, 4	- Z.9	0,3	2.3	, 4. 8	6.1	8.1	9, 3	10.9	18,1	19.0	0, 16	16
19	-12.0	0.16		- 5, 3	- 2,9	-0.0	1,3	3.0	4.1	5.4	6.9	7.8	13,1	14.0	0, 16	19
20	-11.0	0, 16		- 5.8	- 2.8	-0.2	0.7	1.9	2.8	4.0	5, 2	6.4	10.1	11.0	0.16	20
21	- 8.0	0.32		- 5.6	- 1.0	-0.3	0.3	1.4	1.9	2.8	3.6	4,4	7.5	8.0	0.32	21
22	-13.0	ő. 16		- 5.6	- 2,8	-0,5	-0.0	1, 3	2.1	3.2	4.1	5,2	7, 1	8.0	0,16	22
23	- 7.0	0.32		- 4, 1	- 2.7	-0.5	-0.0	1,1	1,8	2.8	3.8	5.2	11,1	12.0	0.16	23
24	- 9.0	0.16		- 5.1	- 2.3	-0.5	-0.0	0.8	1.6	2.7	3.7	5.2	10.1	11.0	0.16	24
25	-11.0	0.16		- 5.0	- 2.1	-0.6	-0. 1 [°]	0.9	1,6	2.6	3, 8	4.7	6.1	7.0	0.16	25
26	-15.0	0.16		- 5.1	- 3.9	-0.6	-0.0	1.2	1.9	3.1	. 4.7	5.7	7, 1	8.0	0.16	26
27	- 9.0	0,16		- 5.0	- 3.9	-0.8	-0, 1	1.1	2.1	3,4	4.9	5.8	9.1	10.0	0,16	27
	(I) When		•					<u> </u>		<u> </u>	لبسيا			لسسا		

STATIO		•													-	
STATIO				BANTA	MONICA	, CALIF	DRNIA		÷.			SA	NTA MO	NICA, C	ALIFOR	INLA
	ON ELEV			JUNE					·· · · · ·			╌┠╌				-
STATIC		ATION:		125 feet	or 38.1	moters N	481.					يـــــــــــــــــــــــــــــــــــــ		JUNE	· ·	
	ON COOP	DINATE	:S:	≸4.01 de	g N, 11	27 deg	W							2		
PERIO	OF OF	SERVA	NON:	Long Be	ach, Cal	lfornia alifornia	January April	1, 1956- 18, 1956	April 17 Decemb	, 1956 er 31, 1	760			compone		
DATA S	SOURCE			National		r Records						NO	o, of or	S FOR	EACH L	EVE
				Ashavill	e. North	Carolina		dun la la da	ation.				<u></u>			
PREPA	RED BY	: •		Marshal Aerophy	i Space : sice and	rics and Flight Co Astrophy	nter. Ac	TOPFILE	tics Divi	olon: Alabam			me	UNITS: eters/pec	ond	23 12.1
Alt.	Ext.	Pct.		rebruar	y 23, 19	CUMULA	TIVE P	ERCENT	AGE FR	EQUENC	Y			Ext, Speed	Pct. Freq.	Alt.
MSL) km	Speed	Freq	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	apeed	Freq.	km
ofc	- 3,0	0,17		- 1.1	-0.8	-0.0	0.8	1, 8	2.4	3.0	3.6	4.0	6.1	7.0	0.17	sfc
ı	-10.0	0, 33		- 6,1	-2, 2	-0.6	-0.1	0,9	1.6	2.4	3. 5	4.5	5, 5	6.0	0.33	1
2	-16.0	0.17	·	- 8.5	-3.7	-0.3	0.6	2. 5	3.4	4.5	6.0	7.2	12, 1	13.0	0.17	2
3	-12,0	0.33		- 9.4 -3.4 0.3 2.4 4.8 6.4 8.7 10.1 - 9.8 -3.5 1.1 3.7 7.0 9.1 11.6 13.1									15.5	16.0	0.33	3
. 4	-13. R	0.17		- 9.8	-3, 5	1, 1	3. 7	13.3	15.6	17.7	18.0	0.50	1			
5	-14.0	0.17		-9.8 -3.5 1.1 3.7 7.0 9.1 11.6 13.3 -11.5 -3.1 1.2 4.4 8.1 10.4 13.2 16.0									29.1	30.0	0.17	5
6	-24.0	6, 1 7		-13,9	-4. 3	1, 1	4. 7	8.8	10.6	14,0	17.6	21.6	27.1	28, 0	0.17	6
7	-29.0	0, 19		-13.9	-6.9	1.6	5. 7	9.7	11.9	15.0	18.6	24.0	30.1	31.0	0.17	7
В	-42.0	0,17		-14.1	-6.4	2.0	6.7	11.7	14.3	18.0	20.8	25.0	37.1	38.0	0,17	
9	-48.0	0,17		-18,6	-7.7	2,5	8, 3	14.0	17.5	20.1	23.8	26.5	39,1	40,0	D. 17	9
10	-50.0	0.17	1	-19.3	-7.6	3, 5	10.4	15.9	18.9	22.0	26.3	29.4	38, 1	39.0	0.17	10
11	-53.0	0.17	İ	-23.3	-7.1	4, 3	11.5	18.5	21.1	24.6	29. 2	32.0	33,7	34.0	0.67	11
1,2	-49.0	0.17		-22. 3	-7.4	5. 4	12, 4	20.1	24.0	27.4	29.9	33.5	40.1	41.0	0.17	12
13	-38,0	0.17	ļ	-17.2	-4.0	5.9	12,8	20.1	23.1	27.3	29.6	34.3	37.5	38.0	0.33	13
14	-25,0	0.17		-14.8	-3.5	5,6	11.9	18.4	21.7	24.7	26.5	28.5	39.1	40,0	0.17	14
15	-19.0	0.17		- 9.1	-1.3	4, 5	9.6	15.0	17.2	19.4	21.7	23,0	27.5	28.0	0.33	15
16	-14.0	0.17		- 7.8	-1.7	3.6	7, 1	10.6	12.4	14.5	17.6	20.0	24, 1	25.0	0.17	16
17	- 9.0	0.33	•	- 6.9	-1.3	2. 4	4, 7	7,3	9, 1	11.0	13, 3	15.5	25. 1	26.0	0.17	17
18	- 8.0	0.33		5.7	-1.2	1.0	2, 6	4.8	6.1	7.7	9.0	10.7	15.1 11.1	16.0 12.0	0.17	18
19	- 7.0	0.17	l	- 4.7	-1,5	0, 2	1.4	2.7	3,7	5.0 3.6	6.5	7.7 6.2	9.1	10.0	0.17	20
20	- 5.0	0,33		- 3.2	-1.2	-0, 2	0.6	1.8	2.6 1.8	2.8	5. 1 3. 7	5.0	8.5	9.0	0.17	21
21	- 9.0	0.17		- 4,6	-1.3	-0.3	0.2	1,1					7.7	8.0	0, 50	22
22	- 9.0	0.17		- 3,1	-1.1	-0.4	-0.0	0.9	1.5	2,4 2,4	3.5 3.1	4.6	6.1	7.0	0, 30	23
. 23	-11.0	0.33		- 3.0	-1.0	-0, 4 -0, 4	-0.0	0.8	1.6	2.4	3, 4	7.0	11.1	12.0	0,17	24
24	- 9.0	0,17		- 4.4	-1.0 -2.5	-0.4	-0.0	1,1	1.6	2.2	3, 3	4.0	8.1	9.0	0,17	25
25	-10.0	0.17		- 4.2	-2.5 -2.5	-0.5	-0.0	0.9	1.6	2,2	3, 3	4.0	6.1	7.0	0,17	26
26 27	- 7.0 - 8.0	0,50 0,33		- 5.6	-2.5	-0.5	0.0	1.2	1.7	2.7	3.5	4.0	5.7	6.0	0.50	27

-		Т.	ABLE II	I-8° D	ISTRIBU	TION OF	MERID	IONAL. W	AIND\$			меі	RIDIONA	L WIND	DISTRIB	итіон
STATIO	ON: RENCE P	ERIOD:	•	SANTA_	MONICA,	CALIF	ORNIA		:			SZ	NTA MO	ONICA, C	ALIFOR	INIA
STATIO	ON ELEV	ATION:		125 feet	or 38.1	meters !	MSL						-	JULY		
STATIO	ON COOL	DINATE	:S:	34.01 de	og N, 116	27 deg	w				2					
PERIO	D OF CU	SERVAT	NON:		ach, Cali					7, 1956 per 31, 1	260			compone		
DATA	SOURCE	:			Weather		• Center					NO	o, of 01	SS. FOR	EACH L	EVEL:
	-			Ashevill	eather B e. North Aeronau	Carolin		doniniati	atlon					620		
PREP/	ARED BY	' :		Marshal Aerophy	I Space I	Flight Co Astroph	nter, A	eroballis	tics Diví	sion , Alabam	ia.		m	UNITS:		
Alt.	Ext.	Pct.		Februar	y 23, 19		TIVE P	ERCENT	AGE FR	EQUENC	Y			Ext.	Pct.	Alt.
(MSL) km	Speed	Freq.	0.135	2.28	15.9	50.0	6 8. 0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL) km
∎fc	- 3.0	0.16		-1.2	-0.7	0.1	0.9	1.8	2.2	2.7	3.3	3.8	4, 7	5.0	0.65	sfc
1	-10.0	0.32		-4. Z	-1.5	-0.2	0.4	1.4	1.8	2.5	3.4	4.2	6.1	7.0	0.16	1
Z	-11.0	0.16		-4.1	-1.1	0.2	1.7	3.5	4.6	5,7	7.2	8.2	10.1	11.0	0.16	2
3	- 8.0	0.16		-4.4	-0.8	1.5	3.5	6.2	7.7	10.0	11.6	12.8	17, 1	18.0	0.16	3
4	- 8.0	0.16		-4.8	-0.5	3.0	4.9	7.6	12.8	13.9	16.5	17.0	0.32	4		
5	- 6.0	0.32		-3.0	-0.5	3.0	5.4	8.4	12.7	14.1	17.1	18.0	0.16	5		
6	- 7.0	0.16		-3.2	-0.4	3.4	5.8	9.1	13.8	15.9	20.1	21.0	0.16	6		
7	-11.0	0.16		-4.5	-0.6	3.8	6.4	9.7	11.9	14.5	16.5	20.4	24.1	25.0	0.16	'
8	-10.0	0.16		-6.6	-0.6	4.6	7.6	11.1	13.1	16.6	19.7	22.9	29.1	30.0	0.16	8
9	-15.0	0.16		-8.5	-0.5	5.4	8.6	12.0	15.3	18.8	21.9	24.9	34.1	35.0	0.16	9
10	-14.0	0.32		-8.0	-0.4	6.7	10.1	14.7	16.8	21.1	24.9	28.2	33.5	34.0	0.32	10
11	-16.0	0.32		-9.7	-0.4	8.1	11.6	16.6	19.4	23.2	25.9	31.4	38, 1	39.0	0.16	11
12	-14.0	0.48		-9.0	-0.3	8.3	12.4 12.1	17.3	20.0	23.8	27.8 27.4	32.4 31.4	40.5 35.1	41.0 36.0	0.32	12
13	-15.0	0.16		-9.3	-0.7	8.3 7.0	10.3	15.0	16.7	20.0	22.2	25.6	31.1	32.0	0.16	14
14	-13.0 -10.0	0.16		-7.5 -5.4	-0.5 -0.5	4.9	7.8	10.9	13.2	15, 1	17.2	19.4	24.1	25.0	0.16	15
15	- 8.0	0.16		-4.7	-0.5	3.2	5.1	7.7	9.0	10.9	12.6	14.2	17.5	18.0	0.10	16
17	- 7.0	0. 10		-4.4	-1.7	1.9	3.3	5.2	6.3	7.3	8.5	9,8	12.1	13.0	0.16	17
.18	- 7.0 - 5.0	0.65		-3.0	-1.6	0.7	2.0	3.5	4.2	5.1	5.8	6.4	9.1	10.0	0.16	18
19	- 5.0	0.48		-3.0	-1.7	0.1	1.2	2.4	2.9	4.0	4.8	5,4	6.1	7.0	0.16	19
e 0	- 5.0	0.16		-3.5	-1.6	-0.1	0.7	1.7	2.2	2,9	3.9	4.8	7.1	8.0	0.16	20
25	- 6.0	0.16		-3.4	-1.5	-0.1	0.5	1.4	1.9	2.7	3.7	4,8	6.7	- 7.0	0.48	21
22	- 5.0	0.16		-3.7	-1.6	-0.2	0.3	1.5	2.1	2,9	3.6	4.1	6.1	7.0	0.16	22
23	- 4.0	0.65		-3.7	-1.5	-0.3	0.3	1.3	1.8	2.6	3.4	3.9	6.1	7.0	0.16	23
24	, 5.0	0. 32		-3.2	-1.3	-0.3	0.2	1.2	1.7	2.6	3.6	4.4	6.5	7.0	0.32	24
25	- 6.0	0.16		-3.0	-1.1	-0.4	0.1	1,0	1.6	2.7	3,6	4.4	6.1	7.0	0.16	25
26	- 9.0	0.32		-3.0	-1.2	-0.3	0.2	1.3	2.2	2.9	3, 9	4.8	9.1	10.0	0.16	26
27	-13.0	0.16		-4.0	-1.0	-0.3	0.4	1.7	2.4	3. 2	4.3	5.4	14.5	15.0	0.32	27
-	لسسا	لسبسيك	<u> </u>								mulative		<u> </u>	<u> </u>		<u> </u>

		T.	ABLE III	-9 D	ISTRIBU'	TION OF	MERIOI	ONAL W	INDS		•	MER	IDMNAI	. WIND D	ISTR IBI	UTION
STATI	ON: RENCE P	ERIOD:		SANTA I	MONICA,	CALIF	RNIA					SA	NTA MO	NICA, C	ALIFOR	NIA
	ON ELEV				or 38.1	meters A	151.							AUOU	ST.	
ITATE	ON COOL	DINATE	:S:	34 01 de	g N, 118	27 deg	w						-			
PERIO	D OF CE	SERVAT	NON:	Long Be	ach, Cali	forma . Mforma	January April I	1, 1956- 8, 1956-	April 17 Decemb	, 1956 er 31, 1	960	Pos Neg	itive for ative for	compone	nts from	sout north
DATA	SOURCE	:	., .	National	Weather eather B	Records						NO	OF OF	S. FOR		EVEI
PREP	ARED BY	':	-	Ashevill National Marshal Aerophy	e. North Aeronau I Space I sics and y 23, 19	Carolinatics and light Co Astrophy	Space Ai	roballist	ica Divi	ion Alaban) #		me	UNITS:	ond	
Alt.	Ext.	Pet.		L column		CUMULA	TIVE P	CRCENT	AGE FR	EQUENC	Y			Ext.	Pct.	Alt.
(MSL)	Speed	Fraq.	0.135	2.28	15.9	50.0	68.0	84. I	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSI km
sfc .	- 4.0	0.32		-1,1	-0.7	0.0	0.8	1.7	2, 1	2.7	3, 0	3.8	5, 1	6.0	0.16	ofc
i	- 8.0	0.16		-3, 3	-1.7	-0, 2	0.3	1, 2	1.8	2,6	3, 2	3.9	5. l	6.0	0.16	,
2	-10.0	0.16		-4, 1	-0.9	0.5	1.7	3, 2	4,0	4.8	6.3	6.9	11,1	12.0	0,16	2
3	- 8.0	0.16		-5, 5	-0.9	1.8	3.4	5, 1	5.8	7.2	8.7	9.7	13.1	14.0	0.16	3
4	- 9.0	0.16		-4, 3	-0.8	2, 3	4.3	6.6	7.6	8.7	9.9	11.3	14.1	15.0	0, 16	1
5	-10,0	0.16		-4.7	-0.9	2.0	4.4	7.0	8.7	10.0	11.6	12.7	14.7	15.0	0.48	9
6	-13.0	0.16		-4.2	-1,4	2. 1	4.6	7.6	8.8	11,5	13.7	15.1	16.1	17.0	0.16	6
7	-13.0	0.16		-5.5	-1.8	2. 4	5, 1	8. 1	9.8	11.8	15,1	17.4	21.1	22.0	0.16	7
8	-12.0	0.16		-6.1	-1.7	3,0	5.7	9.6	11.7	14.6	18.4	. 21.3	22.7	23.0	0,48	8
9	-13.0	0.16		-7.6	-0.9	4.0	7.0	12.1	14.8	18.2	21.8	24.2	28.1	29.0	0.16	9
10	-16.0	0.16		-7.2	-0,7	5. 1	9. 2	14,3	17.5	22.0	25.9	27,3	36.1	37.0	0.16	10
11	-17.0	0.16		-9.3	-0.8	7.3	11.1	16,8	19.6	23.3	27.3	30.7	37.1	38.0	0.16	11
12	-17.0	0.16		-9.4	-0, 4	8, 3	12.8	17.7	20,8	24.8	27.6	30.4	39.1	40.0	0.16	12
13	-14.0	0.16	ł	-7.5	-0.1	8.9	12.3	17.6	20, 3	23.8	26, 2	28.6	33.1	34.0	0.16	13
14	- 9.0	0.48	1	-6.0	0.7	7.5	10.7	14.8	16.7	19.5	21.9	22.9	31,1	32, 0	0.16	14
15	-17.0	0.16		-5.0	0, 1	5,6	8.1	10.7	12.3	14.7	16.6	18.5	23.1	24.0	0,16	15
16	- 9.0	0,16	ļ	-4.4	-0.5	3.5	5,6	7.8	9.0	10,7	12.6	15.2	17.1	18,0	0.16	16
17	- 6.0	0.16	I	-3, 1	-0.9	1.4	3.1	5, 2	6.1	7.0	8.8	9.9	18.1	19.0	0.16	17
18	- 6.0	0.16	1	-3.4	-1.8	0, 3	1.5	Z. 9	3.6	4.6	5, 8	6.8	9.5	10.0	0.32	1
19	- 7.0	0.16	1	-4.9	-1.5	-0.1	0.7	1.8	2.4	3.2	4. 2	5.1	8.1	9.0	0.16	1
20	-10.0	0.16	I	-3.1	-1.7	-0,2	0.4	1.4	2.6	2.8	3, 5	3.9	6.1	7.0	0,16	20
2‡	- 6.0	0.32		-3.3	-1.4	-0.3	0.2	1,3	1.8	2.6	3. 2	4.1	5.5	6.0	0.32	2
22	- 7.0	0.48	1	-4.5	-1. I	-0.4	0.1	1.3	1.9	2.6	3.3	4.1	7.1	8.0	0.16	2
23	- 8.0	0,16		-3.0	-1.1	-0.4	9.1	1.3	1.8	2.7	3,6	4.7	13, 1	≱4, 0	0.16	2
24	- 6.0	0.48		-4.6	-1.0	-0.4	-0.0	0.9	1.6	2.6	3.5	4.4	5.7	6.0	0.65	2.
25	- 8.0	0.32		-4.6	-2.9	-0,5	-0.0	1, 1	1.7	2.7	3.6	4,3	5.7	6.0	0,48	2
26	- 7.0	0.16	ł	-4.4	-2.9	-0.5	0.0	1.0	1.8	3.2	4. 2	4.7	6.5	7.0	0.32	20
27	- 5.0	1.29	1	-4.3	-2.4	-0.5	0.2	≱,5	2.3	3.4	4, 4	4.9	7, 1	8.0	0.16	Z

		T	ABLE III	[-10 D]	ISTRIBU	TION OF	MERID	IONAL W	INDS			мея	RIDIONAL	L WIND I	DISTRIB	ITUTTU
STATIO	ON: RENCE P	ERIOD:		SANTA I		CALIF	ORNIA			-		S.A	NTA MC	ONICA, C	ALIFOR	NIA
STATIO	ON ELEV	ATION:		125 feet	or 38.1	ineters !	MS1.						s	EPTEME	ER	
STATIO	ON COOL	DINATE	S;	34.01 de	g N. 118	27 deg	w									
PERIO	D OF OB	SERVAT	ION:	Long Bo Santa Mo	ach, Cal	iforma alifornia	January April	l, 1956- 18, 1956	April 17 - Decemb	1956 er 31, 1	960		itive for			
DATA	SOURCE	:		National U. S. W		r Record	• Center		,			NC	o, of or	S. FOR	EACH L	EVEL:
PREPA	ARED BY	`:		National Marshal	Aeronas I Space	Flight Co	Space A	dininistr croballist	ation tics Divi	sion Alabam		1	Thi	UNITS:		
434	Ext.	Dec	<u> </u>	Februar	y 23, 19	62			AGE FR					Ext.	Pct.	Alt.
Alt. (M5L)	Speed	Pet. Freq	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL) km
km efc	- 3.0	0.67		- 2.5	-0.9	-0.1	0.4	1.4	2.0	2.6	2.9	3.5	4.1	5.0	0.17	sfc
1	- 7.0	0.17		- 5.9	-1.5	-0.2	0.4	1.3	1.8	2.6	3.3	4.0	5.1	6.0	0.17	1
2	-14.0	0.17		- 6.6	-2.8	0.5	2.0	3. 7	5.1	6.5	7.7	8.8	11.1	12.0	0.17	2
3	-16.0	0.17		- 7.0	-2.2	1.2	3.7	12.4	14.6	21.1	22.0	0.17	3			
4	-20.0	0.17		-11.3	- 3. 2	1.6	4.0	7.1	14.7	19.5	24.1	25.0	0.17	4		
5	-22.0	0.17		-13.7	-3.4	1.8	4.1	6.6	15.3	18.0	24.1	25.0	0.17	5		
6	-24.0	0.33		-15.6	-3.0	2.3	4.9	18.1.	21.3	24.5	25,0	Q. 33	6			
7	-29.0	0.17		-15.3	-4.4	2.4	5.2	9.8	12.0	15.6	21.1	24.5	28.1	29 .0	0.17	7
8	-26.0	0.33		-16.6	-4. Z	2.6	6.5	11.4	14.3	18.3	24.1	26.6	30.1	31.0	0.17	8
9	-27.0	0.17		-17.6	-5.6	2.7	7.1 -	12.8	16.5	21.6	27.7	3Z. Z	36.1	37.0	0:17	9
10	-25.0	0.17		-16.1	-5.9	2.8	7.8	14.9	18.1	24.7	30. Z	32.0	41.1	42.0	0.17	10
11	-29.0	0.17		-14.6	-4.0	3.5	8.7	16.1	20. Z	25.7	30.8	35.0	42.1	43.0	0.17	11
12	-29.0	0.17		-12.9	-4.8	3.8	9.8	16.3	20.2	26.4	35.0	37.0	45.1	46.0	0.17	12
13	-24.0	0.17	l	-11.9	-3.7	4.3	9.3	15.9	19.0	25.3	33.3	35.8	48.1	49.0	0.17	13
14	-17.0	0.17	1	-10.4	-2.5	3.8	8.3	13.9	17.8	22.7	27.8	32.5	39.5	40.0	0.33	14
15	-17.0	0.17		- 7.3	-2.7	3.2	6.2	11.6	15.5	21.1	24.5	28.0	34.5	35.0	0.33	15
16	-12.0	0.33		- 6.6	-2.8	1.9	4.3	8.2	10.9	15.5	18.3	20.0	26.5	27,0	0, 33	16
17	-10.0	0.17		5.0	-2.3	0.5	2.5	5.1	6.8	9.5	12.0	14.3	20.1	21.0	0.17	17
18	- 9.0	0.17		- 5.2	-2.2	-0.3	0.7	2.6	3.7	6.0	7.7	. 9.0	13.1	14.0	0.17	18
19	-12.0	0.17		- 5.7	-2.3	-0.5	0.0	1.6	2.6	4.0	5.2	6.0	9.1	10.0	0.17	19
20	- 8.0	0.17		- 4.4	-2.8	-0.5	-0.0	1.2	1.9	2.7	3.9	5.8	8.1	9.0	0.17	20
21	-12.0	0.17.		- 4.7	-2.8	-0.5	-0.1	0.7	1.3	2.0	3.0	4.0	7.5	8.0	0.33	21
22,	- 7.0	0.17		- 4.7	-2.9	-0.5	-0.1	0.5	1.0	1.8	2.7	4.0	7.1	8.0	0.17	22
23	- 7.0	0.33	l	- 4.8	-2.8	-0.6	-0.2	0.5	1.0	1.8	2.8	3.7	6. 1	7.0	0.17	23
24	- 5.0	0.50	1	- 3.1	-1.0	-0.5	-0.1	0.7	1.4	2.4	3.5	4.8	8.5	9.0	0.33	24
25	4 6.0	0.17		- 3.0	-2.9	-0.5	-0.0	1.0	1.6	,2. 3	2.9	4.0	7.1	8.0	0.17	25
26	- 6.0	0.67	Ī	- 4.4	-2.6	-0.6	-0.1	0.9	1.5	2.2	2.9	3.7	4.7	5.0	0.67	26
27	- 8.0	0.33		- 5.8	-2.5	-0.5	-0.1	0.8	1.6	2.5	3.4	4.3	6.5	7.0	0. 33	27

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.28 and or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

		TA	BLE III	-11 DI	STRIBUT	ION OF	MERIDI	ONAL W	INDS			MER	IDIONAI	, WIND D	ISTRIB	UTION
STATIO	ON: ENCE 12	ERIOD:		SANTA N		CALIFO	ORNIA					SA	NTA MC	NICA, C	ALIFOR	I N IA
	N ELEV			125 feet	or 38.1 n	neters M	ISL							остові	ER	
STATIC	ON COOR	DINATE	.S:	34.01 de	g N, 118	27 deg '	w			_,						
											<u> </u>				-1- (
PERIO	D OF OB	SERVAT	'ION:	Long Bea	ich, Calif mica, Ca	forma . lifo rnia	January April l	1, 1956- 8, 1956-	April 17, Decembe	, 1956 er 31, 19	960	Neg	itive for gative for	compone	nts fron	north
DATA	SOURCE			National U.S. W			Center					No	O. OF OI	620	EACH L	EVEL:
				Asheville	North	Carolina	Space A	dministra	ition		A	+		UNITS:		
PREPA	RED BY	:		Marshall Acrophy	Space F sics and	hight Ce: Astrophy				ion Alabain	a		ime	eters/sec	ond	
Alt	Ext.	Pct.		Februar			TIVE P	ERCENT	AGE FRI	CUENC	Υ			Ext. Speed	Pct. Freq.	Alt. (MSL
(MSL) km	Speed	Freq.	0 135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Эрсес		km
síc	-11.0	0.16		- 4.9	- 1.2	-0.4	-0.0	. 0.9	1.5	2.1	2.7	3.3	5.1	6.0	0.16	afc
1	-20.0	0.16		- 8.2	- 3.8	-0.5	0.0	1.1	1.8	2.7	3.7	4.5	6.5	7.0	0.32	1
2	-16.0	0.16		-10.3	- 4.5	-0.6	0.4	2.2	3.3	4.9	7.2	8.9	11.1	12.0	0.16	2
3	-19.0	0.16	1	-13.5	- 6.6	-1.9	0.3	3. 1	4.5	7.0	8.9	10.9	14.1	15.0	0.16	3
4	-25.0	0.16		-15.0 - 7.2 -1.0 0.3 3.8 5.4 7.8 10.9 -19.2 - 9.5 -1.0 0.7 4.4 6.4 8.6 11.9									16.1	17.0	0.16	4
^ 5	~31. Q	0.16	1	-19.2	- 9.5	-1.0	0.7	4.4				15,6	22.1	23.0	0.16	5
6	-49.0	0.16		-24.2	-11.8	-2.5	1.0	5.1	7.4	10.7	13.5	18.9	22.7	23.0	0.48	6
7	-47.0	0.16		-27.0	-11.1	~2.9	1.2	5.6	8.6	13.1	16.9	23.8	31.1	32.0	0.16	7
8	-49.0	0.16	1	-30.2	-13.0	-2.8	1.6	6.2	10.2	15.5	20.6	23.9	37.1 44.1	38.0 45.0	0.16	8 9
9.	-52.0	0.16		-34.0	-14.5	-2.7	2.0	7.7	12.6	17.3	24.8	30, 2	41.1	42.0	0.16	10
10	-57.0	0.16	l	-36.0	-15.1	-1.0	2.7	8.7	13.6	18.6	26.4 25.6	31.8	42.1	43.0	0.16	111
11	-53.0	0.16	1	-38.7	-16.4	-1.1	2.8	9.5	13.3	21,1	22.4	26.7	46.1	47.0	0.16	12
12	-50.0	0.16	l	-34,0	-15.8	-0.8	3.1	8.9	13.6	17.5	19.9	22,7	28.1	29.0	0.16	13
13	-41.0	0.16	l	-31.5	-11.0	-0.2	3.6	9.1	11.2	15.0	18.3	20.9	26.1	27.0	0.16	14
14	-40.0	0.16	ļ	-22.0	- 9.2	-0.1	4.0	7.1	8.8	11.7	14.1	17.8	20.1	21.0	0.16	15
15	-30.0	0.16		-18.0	- 8.5	-0.0 -0.2	2.9	6.1	7.6	9.3	12.3	14.9	20.1	21.0	0.16	16
16	-23.0	0.16	1	-15.3	- 7.9	-0.2	1.8	4.7	5.8	7.2	8.7	10.9	12.7	13.0	0.48	17
17	-16.0	0.16		- 8.4	- 5.9	-0.5	0.9	3.2	4,2	5.B	6.8	8.4	9.7	10.0	0.65	18
18	-13.0 -16.0	0.32	1	7.4	- 4.7	-0.8	0.3	2.2	2.9	4.4	5.5	6.6	8.5	9.0	0.32	19
20	-10.0	0.16		- 7.4	- 3.1	-O.B	-0.1	1.4	2,3	3.5	4.6	5,5	9.1	10.0	0.16	20
21	-12.0	0.16		- 7.2	- 3.3	-0.9	-0.2	0.9	1.8	2.9	4.1	5.1	7.1	8.0	0.16	Zī
. 22	-14.0	0.16	1	- 6.1	- 3.4	-0.8	-0.1	0.9	1.7	2.8	4.3	5.7	8.5	9.0	0.32	22
23	-11.0	0.16	1	- 6.7	- 3.8	-0.7	-0.0	11	1.7	2.9	4.6	5.5	8.1	9.0	0.16	23
24	-13.0	0.16	Ì	- 6.2	- 3.8	-0.6	-0 0	1.2	1.9	2.8	3.7	4,8	6.1	7.0	0.16	24
25	9.0	0.48		- 6.5	- 2.3	-0.5	0.1	1.5	2,1	3.2	4.6	5.7	7.1	8.0	0.16	25
26	- 9.0	0.16	1	- 5.7	- 2.3	-0.5	0.1	1.6	2,4	3,5	4.7	6.4	9.1	10.0	0.16	26
27	-10.0	0.16	1	- 5.0	- 2.1	-0.5	0.2	1.8	2.8	3.7	4.8	5.8	8.5	9.0	0.32	27

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.28 and or 0.135 cumulative percentage frequency—the speed associated with the cumulative percentage frequency exceeded was not determined.

		т.	ABLE II	1-12 D	ISTRIBU	TION OF	MERID	IONAI, V	VINDS	· · · · · · · · · · · · · · · · · · ·		MEI	RIDIONA	L WIND	DISTRIB	55 UTIO:
STATIO	ON: RENCE F	ERIOD		SANTA I	MONICA,	CALIF	ORNIA					ς,	NTA MO	ONICA, O	CALIFO	INIA
	ON ELEV				or 38.1	meters	MSL							NOVEM	BER	
STATIO	ON COOL	DINATE	ES:	34.01 de	g N, 118	27 der	w									
													_		<u> </u>	
PERIO	D OF CE	SERVAT	NON:	Long Be Santa M	ach, Cat onica, C	ifornia alifornia	January April	1, 1956 18, 1956	-April 17 -Decemb	, 1956 er 31, 1	9 ь 0			compone		
DATA:	SOURCE	;			Weather eather B		• Center					No	O. OF O	BS, FOR	EACH L	EVEL:
PREPA	ARED BY	·	•	National	e. North	tics and	Space A	dininistr	ation					UNITS:		
				Aerophy	I Space I sics and y 23, 19	Astroph	enter, Ae sysics Br	anch, H	tics Divi antsville,	slon Alabam	ıa		m	eters/se	cond	
Alt.	Ext.	Pct.					ATIVE P	ERCENT	AGE FR	EQUENC	Y			Ext. Speed	Pct. Freq.	Alt. (MSL)
(MSL) km	Speed	Freq.	0 135	2.28	15.7	50.0	68.0	84. I	90.0	95.0	97,72	99.0	99.865	.speed	rreq.	km
efc	-12.0	0.17		- 6.9	- 2.1	-0,8	-0.3	0,3	0.9	1.7	2.4	3.0	14, 1	15.0	0.17	síc
ì	-14.0	0.50		- 8.2	- 3.1	-0.7	-0.2	0.6	1.2	2.5	3.8	7.5	11,1	12.0	0,17	1
2	-19.0	0.17		-12.9	- 5.3	-1,7	-0,3	8, 1	11.7	16.1	17.0	0.17	2			
3	-27.0	0.17		-16,4	- 8.1	-2. 2	-0.5	11.6	14.0	23.1	24.0	0.17	3			
4	-26.0	0.17		-18.8	-10,3	-3.7	-0.7	1.3 2,4	15,6	22.0	32, 1	33.0	0.17	4		
5	-33.0	0.17		-22, 4	-12.4	-4.9	-0.8	18.7	24.0	38.1	39.0 35.0	0.17	5			
6	-61.0	0.17		-25.8	-13, 3	-4.3	-0.6	3.1 4.0	5.8 7.1	13.4	23, 1 25, 3	27.5 35.5	34. l 50. l	51.0	0,17	7
7 8	-51.0 -59.0	0.17		-29.6 -31.4	-14. Z -17. 8	-4. 5 -4. 5	-0.3 0.1	5.4	8.7	18.7	29, 1	34.0	45. İ	46.0	0.17	8
9	-57.0	0,17		-37.8	-18.6	-4. 3	0.1	6,6	10.8	22.2	32, 3	36.5	44.1	45,0	0.17	9
10	-54.0	0,17		-37. 4	-19,1	-6.0	0.7	7.5	12.8	22.1	31,1	37.0	47,5	48.0	0.33	10
11	-47.0	0.17		-38.1	-20.6	-4, 2	1,8	7.7	14.2	23.7	29.7	35.0	41,1	42.0	0.17	11
12	-47.0	0.17		-37.3	-19.7	-3 . l	1.3	7.6	13.6	24.0	27.4	30.0	35, 1	36.0	0,17	12
13	-47.0	0.17		-34.5	-16.4	-2. 2	2.2	8.1	12.5	21.0	26.0	27.7	32.1	33.0	0.17	13
14	- 42. 0	0.17		-31.6	-14.8	-2.4	1.3	7. 2	10.5	18.4	23.5	27.0	35. 1	36.0	0, 17	14
15	-39.0	6.17	l	-23.5	-12.9	-2.1	0.6	5.5	8.6	16.5	21.2	24.5	35.1	36.0	6.17	15
16	-27.0	0.17		-20.6	-10, 2	-2.4	-0.1	4.0	7.7	13.8	16.3	21.3	26, 1	27. D	0.17	16
17	-24.0	0.17		-16.1	- 8.6	-2.1	-0,5	2.9	6.3	9.3	11.8	13.6	26, 1	27.0	0.17	17
18	-17.0	0.50		-13.0	- 7.6	-2. C	-0.6	2, 2	4.4	6.8	8.5	13.0	18.1	19.0	0, 17	18
19	-14.0	0.17		- 9.0	- 6.7	-2.5	-0,7	1,6	3.3	5.5	7.6	12.0	20.1	21.0	0.17	19
20	-13.0	0.17		-10.9	- 5.3	-1.0	-0.5	1.3	2.7	4,5	6.1	8.7	16.1	17.0	0,17	20
21	-15.6	0.17		- 7.1	- 4,3	-1.4	-0.4	1.1	2.2	3.5	5.1	6.5	13.5	14,0	0.33	21
22	-14,0	0.17		- 7, 1	- 4.3	-1.6	-0.3	1.1	1.9	3.5	5,1	6.3	8.5	9.0	0.33	22
23	-11.0	0,50		- 7,1	- 4.7	-1.7	-0, 2	1.1	2.0	4.2 5.1	5.4 7.4	6.5 9.2	17.1 12.1	18.0	0.17	23
24 25	-12.0 -12.0	0. 17 0. 17		- 7.3	- 4,5 - 4,3	-1.8 -1.8	-0, 2 -0, 2	1,1	2.3 3.1	5.1	7.3	9.4	12.1	13.0	0.17	25
26	-12,0	0.17		- 8.4	- 4.0	-1.8	-0, 2	1.9	3, 3	5,4	7.1	10.0	12.5	13.0	0.33	26
27	-13.0	0.17		- 9.2	- 5,3	-1. 4	-0.1	2, 2	3.4	6.5	9.2	11.3	15. I	16.0	6.17	27
- '	-15,0	0, 11		7. 2	- 9.3	-1, 7	0.4			3	L					

6										.,						
		т.	ABLE II	[-13 D	ISTRIBU	TION OF	MERID	IONAL W	INDS			ME	RIDIONA	L WIND	DISTRIB	UTION
STATE	ON: RENGE P	ERIOD:		SANTA I	,	CALIF	ORNIA					S	ANTA MO	ONICA, C	CALIFOR	AINS
	ON ELEV				or 38.1	meters !	MSL							DECE	MBER	
CT A TI	ON COOR	DINIA TE		34 O1 de	g N, 116	27 dea	w					_				
SIVIE	JN COOF	(1)11416 1 6		34.01 ***	,g ,,	r. B. Gug	"									
PERIO	D OF OB	SERVAT	rion:	Long Be Santa M	ach, Cali onica, Ca	ifornia alifornia	January April	l, 1956- l8, 1956	April 17 - Decemb	, 1956 ber 31, l	260		itive for ative for			
DATA	SOURCE	:		U.S.W	Weather eather B	HITCAN						N	O. OF 01	0S. FOR 620	EACH L	.EVE1.:
PREPA	RED BY	:		National Marshal	Aerona:	itles and Flight Ce	Space A	roballis	tics Divi	eion				UNITS:		
				Acrophy	sics and y 23, 17	Astroph	yaica Br	anch, lh	intsville.	Alabain	.a		m	eters/sec		
Alt. (MSL)	Ext. Speed	Pct. Freq.		T ,		CUMULA 50.0	TIVE P.	ERCENT 84.1	AGE FR 90.0	EQUENC 95.0	97.72	99.0	99.865	Ext. Speed	Pct. Freq.	Alt. (MSL)
km sfc	-15.0	0,32	0 135	2.28 - 6.1	15.9	-1,9	-0.4	0,0	0.8	1,6	1,9	2,7	4. 5	5,0	0,32	km sfc
src 1	-15.0	0.16		- 9.0	- 4,7	-0.8	-0.2	0.7	1.5	2.6	3.9	8.8	13.1	14.0	0.16	1
2	-27.0	0.16	l	-13.0	- 5.0	-1,7	-0, 1	1.8	2.9	5.3	7.6	11,2	15, 1	16.0	0,16	2
3	-28.0	0.16		-18.0	- 8.0	-2.5	-0.2	2, 5	4.3	6.8	10.2	14.2	19.5	20.0	0.32	3
4	-47.Q	0.16										15.7	26.1	27.0	0.16	4
5	-56.0	0.16		-25.7 -13.8 -2.1 0.1 4.2 6.8 9.9 15.1								18.4	24.1	25.0	0.16	5
6	-64,0	0,16		-29.5	-14, 2	-2.1	0.7	5. 1	8.3	12.0	15.7	17,7	30,1	31.0	0.16	6
7	-76.0	0.16		-34, 1	-16.9	-3, 4	1.0	6.3	9.8	14.0	19. 2	24.9	38.1	39.0	0.16	7
8	-79.0	0,16		-40, 1	-19.6	-3.5	0.9	7.7	11.1	17.5	23.9	29.8	37.1	38.0	0.16	8
9	-73.0	0.16	ĺ	-43.1	-21,6	-4.5	0,3	8.3	13.1	19.6	25.8	33.8	43.1	44.0	0.16	9
10	-57.0	0.16		-44.7	-21.0	-5.8	0.5	9.3	14.8	22.5	30.8	35,7	52.1	53.0	0.16	10
11	-54, 0	0,16		-37.0	-22.8	-4,1	0.6	10,3	15.2	23.0	29.9 30.8	38.4 36.4	56.1 45.5	57, 0 46. 0	0.16 0.32	11
12	-41.0 -39.0	0, 16	l	-32.0	-19.8 -14.0	-3. 4 -3. 8	1.5	10, Z 8, 6	14.6	18.5	23.7	28.9	36.1	37,0	0.16	13
13 14	-35.0	0.16		-23.0	-13.9	-2, 2	1.7	7.7	11.0	16.0	19.7	21.8	29.1	30.0	0, 16	14
15	-32.0	0.16		-20, 7	-11.6	-3, 8	1, 2	7, 0	9.7	13.0	15.8	18,9	26.1	27.0	0.16	15
16	-26.0	0,32		-18.0	-10.0	-2, 3	0.8	5. 4	7.5	10.4	12.9	14.7	21.5	ZZ. 0	0.32	16
17	-23.0	0.16		-14.8	- 8.2	-2, 2	-0.0	4.1	6.0	8.0	9. 9	12.6	23.1	24,0	0.16	17
18	-18.0	0.16		-12, 1	- 7.0	-2.2	-0.3	2, 4	4.2	5.7	7.5	10,4	15, 1	16.0	0,16	18
19	-15,0	0.48		-11.0	- 7.7	-2.3	-0.7	0.9	2.3	4.0	5.5	7.5	16.1	17.0	0.16	19
20	-15.0	0.48		-10.2	- 6.5	-2, 4	-1,9	0.1	1.1	3.0	4. 4	5.7	7.1	8.0	0.16	20
21	-14.0	0.16		- 9.0	- 6.9	-2, 4	-1,9	-0.0	0.9	2,0	3, 1	4.4	7.1	8.0	0.16	21
22	-15.0	0,16		- 9. l	- 6.9	-2.3	-1.5	-0, 2	0.2	1,3	3.2	4.1	5.5	6.0	0.32	22
23	-14.0	0.16	1	- 9.1	- 6.7	-2.3	-1.5	-0, 2	0.3	1.4	2, 8	4.3	5.7	6,0	0.48	23
24	-14.0	0.16		-10.5	- 6,5	-2.1	-1.6	-0, 2	0.5	1.6	2.7	4,4	9.1	10.0	0,16	24
25	-14.0	0, 32		-10.1	- 6.3	-2, 2	-1.8	-0.2	0.4	1.7	2, 9	3.9	14.1	15.0	0.16	25
26	-15.0	0.16	i	-12.7	- 7.7	-3.7	-1.4	-0.2	0.3	1.6	2.7	3.8	6.5 7.1	7.0° 8.0	0, 32	26 27
27	-17.0	0.16	I	-12.5	- 7.2	-3.8	-1.4	-0. l	0.8	1.8	2.9	.4.2	7.1	8.0	0.16	

NOTE: (1) When the percent frequency of extreme speed exceeded the 2.2F and or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

Page

Distribution of Easterly Winds (Component from the east semiplane) Unit: meters per second Table IV-1 Annual 58 Table IV-2 January 59 Table IV-3 February..... 60 Table IV-4 March 61 Table IV-5 April ..., 62 Table IV-7 June 64 Table IV-8 July 65 Table IV-9 August..... 66 Table IV-10...... September...... 67 Table IV-11...... October 68 Table IV-13...... December 70

TABLE IV

			TABL	E [V-1	DIST	(IBUTIO	n of ea	STERLY	WINDS				EA	STERLY	WIND D	ISTRIBU	J TI ON
STATI	ON:			SANT	MONIC	A, CAL	IFORNIA										
REFE	RENCE F	ERIOD:		ANNU	AL								SA	ANTA MO	JNICA, C	ALIFO	CINIA
STATI	ON ELE	VATION:		125 fe	et or 38	i meter	6 MSL								ANNUAI		
STATI	ON COO	RDINATI	CS:	34.01	deg N, 1	18.27 de	g W										
PERIC	D OF OF	SERVA	rion:	Long l	Beach. C	alifornis	Janua	ry I, 19	6-April	17, 1956	, , , , ,						
							rds Cent		56-Decen	nber 31,	1960		INO	OF OBS	FOR E	ACH LE	VEL
DATA	SOURCE	:		U.S.	ai weath Weather ille, Nor	Bureau		e r							7308		
PREP	ARED BY	·:		Nation	al Aeron	autics a	nd Space	Adminis	tration istics Di	vision					UNITS		
				Aerop	hysics ar ary 23, 1	id Astro	physics I	Branch,	Huntsvill	e, Alaba	ma.			m	eters/se	cond	
Alt.	No. of	Min.	Pct.				UMULA	TIVE PI	RCENT	AGE FRE	QUENC	7			Max.	Pct. Freq.	Alt. (MSL
(MSL) km	E'ly Winds	Speed.	Freq.	0.135	2, 28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	rreq.	km
•fc	2990	0.0	44. 38				0.1	0.7	1.4	1.7	2.2	2.9	3,7	5.7	7.0	0.10	∎fc
1	3471	0.0	31.58				0.7	1.6	2.9	3.8	5.1	6.6	8.1	11.6	18.0	0.03	1
2	2693	0.0	21.54				1.4	2.7	4.5	5.6	6.8	8.4	10.0	14.1	19.0	0.04	2
3	2376	0.0	17.59				2.1	3.6	5.6	6.6	8.4	10.6	12. I 12. 8	17.3 22.1	21.0	0.04	3
4	1930	0.0	18.81		Z.1 3.7 6.0 7.2 9.1 11.3 Z.1 3.9 6.2 7.8 9.8 11.7										30.0	0.05	4
5	1623	Q. O	21.01		2.1 3.9 6.2 7.8 9.8 11.7 2.3 4.3 6.9 8.7 10.7 12.7										22.0	0.06	5
6	1404	0.0	18.38		2.3 4.3 6.9 8.7 10.7 12.7										24.0	0.07	6
7	1238	0.0	15.35			0.0	2.8	5.0	8.0	9.7	12.5	15.1	18.5	27.3	35.0	0.08	7
8	1132	0.0	15.11			0.0	2.9	5.4	8.8	10.7	13.8	17.1	19.8	31.4	34.0	0.09	8
9	989	0.0	13.75			0.2	3.4	6.0	9.4	11.7	14.8	18.6	21.5	26.6	28.0	0.10	9
10	877	0.0	13.80			0.1	3.7	6.3	10.7	13.3	16.9	20.5	24, 2	28.8	31.0	0.11	10
11	731	0.0	13.82			0.1	3.8	6.6	10.5	13.2	17.0	21.0	23.6	30.0	31.0	0.14	11
12	566	0.0	14.31			0.1	3.5	6.4	10.7	12.6	16.2	21.2	24.6	30.2	31.0	0.18	12
13	412	0.0	14.81			0.0	3.4	5.7	8.9	11.7	14.4	21.3	23.9	30.4 23.5	31.0	0.28	13
14	355	0.0	16.34				2.9	4.9	8.0	10.1	13.7	19.6 13.6	22, 1 16, 9	21.7	24.0 22.0	0.49	15
15	408	0.0	18.38				2. Z 1. 7	4.0 3.3	6.5 5.3	7.8 6.4	9.9 7.7	9.4	10.9	18.1	19.0	0.17	16
16	602	0.0	19.44				1.7	2.9	4.6	5.7	6.9	8.7	10.0	16.4	19.0	0.09	17
17 18	1156	0.0	17.73 15.13			0.0	2.1	3.6	5.4	6,3	7.6	9.2	10.5	13.3	15.0	0.10	18
18	2832	0.0	11.58			0.3	3.0	4.7	6.7	7.7	9.1	10.3	11,2	14.0	16.0	0.07	19
20	3618	ο. σ	9.89			0.5	3.7	5.7	7.9	9.1	10.5	11.7	12.9	15.4	18.0	0.06	20
21	4261	0.0	9.27			0.6	4.2	6.5	9.1	10,3	11.7	12.9	14,4	17.0	21.0	0.02	21
22	4645	0.0	8.35			0.8	5.0	7.4	10.3	11.4	12.8	14.4	15,8	20.7	28.0	0. OZ	22
23	4832	0.0	7.12			1.1	5.5	8.3	11.3	12,6	14.2	15.6	17.4	23.1	29.0	0.02	23
24	4893	0.0	7.03			1.2	6.2	9.4	12.5	13.9	15.5	16.9	18.6	23.1	30.0	0.02	24
25	4799	0.0	5.96			1.3	6.9	10.4	13.5	15.0	16.6	18.0	20.1	27.3	31.0	0.02	25
26	4694	ø. o	6.11			1.4	7.5	11.1	14.6	15.9	17.7	19.5	21.3	26.8	32.0	0. OZ	26
27	4549	0.0	5.87			1.7	8.3	11.8	15.5	16.8	19,2	20.8	22, 7	28.4	33.0	0.02	27
			L			<u> </u>	L	<u> </u>		Ц	نسبب	L		ــــــــــــــــــــــــــــــــــــــ		L	<u> </u>

			TABI	E IV-2	DISTR	IBUTIO	N OF EAS	STERLY	WINDS				EA	STERLY	WIND D	ISTRIBU	TION
STATI	ON:			SANTA	MONIC	A, CALI	FORNIA						T	NTA M	ONICA, C	AL IEOn	NIA
REFE	RENCE F	ERIOD:		JANUA	LR Y								SA	NTA MC	INICA, C	ALIFOR	NIV
STATI	ON ELE	VATION:		125 fee	et or 38.	l meters	MSL								JANUAR	Υ	
STATI	ON COO	RDINATI	CS:	34.01	deg N. 1	18.27 de	g W										
PERIC	D OF OR	SERVA	TION:	Long I	Seach, C	alifornia Californ	Januar ia April	y 1, 195 I 18, 195	6-April 6-Decen	17, 1956 nber 31,	1960						
DATA	SOURCE						rds Cente	r					NO.	OF OBS.	FOR EA	CH LEV	EL
				Ashevi	Weather lle, Nor	th Carol									620		
PREP.	ARED BY	7:		Marah	all Space	: Flight (nd Space Center, /	\aroba lli	stics Di	vision					UNITS:		
				Aeropi Febru	hysics ar ary 23, 1	d Astroj 962	physics E	ranch,	iuntsvill	e, Alaba	.ma			m	etere/se	-	
Alt. (MSL)	No. of	Min. Speed.	Pct. Freq.			(UMULA	TIVE PE	RCENTA	GE FRE	QUENC				Max. Speed	Pct. Freq.	Alt. (MSL)
km	Winds	эресс.	1 104.	0.135	2, 28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865		0.55	km
síc	386	0.0	42.35				0.2	0.9	1.6	1.9	2.7	3.7	4,6	6.7	7,0	0.55	efc
1	306	0.0	28.43				1.0	2.6	4.4	5.4	6.7	8.6	10.4	17.5	18.0	0.33	2
2	199	0.0	26.13				1.3	2.5	4.1	5,5	7.0	9.6	11.0	11.8	12.0	1.01	
3	94	0.0	26.60				1.1	2.7 4.7	6. 6 8. 1	9.8	13.6	17.8	20.0	20.8	21.0	1.06	3
4	61	0.0	18.03				2.0	19.8	22.3	22.9	23.0	1.64	4				
5_	43	0.0	23.26				3.3	21.0	21,5	21.9	22.0	2.33	5				
6	38	0.0	5.26			0.5	3.0	19.1	19.6	19.9	20.0	2.63	6				
7	37	0.0	16.22				2.8	8.1	13.1	16.2	19.1	23.1	23,6	23.9	24.0	2.70	7
8	37	0.0	16.22				4.7	10.1	12.7	15.2	20.1	27.1	27.6	27.9	28.0	2.70	8
9	28	0.0	7.14			1.4	5.3	7.0	10.5	13.1	19.6	26.3	26.7	26.9	27.0	3.57	9
10	22	0.0	9.09			0.7	5.5	7.6	12.7	13,7	21.9	24.4	24.7	24.9	25.0	4.55	10
11	16	0.0	12.50			1.1	5.0	5.9	8.4	9.3	13,2	13.6	13.8	13.9	14.0	6.25	11
12	11	0.0	9:09	ł		0.3	5.5	7.4	15.2	15.8	16.4	16.7	16.8	16.9	17.0	9.09	12
13	10	0.0	10.00	l	ŀ	0.5	2.0	6.8	13.2	13.5	13.7	13.8	13.9	13.9	14.0	20.00	13
14	2	0.0	50.00					0.3	0.6	0.7	0.9	0.9	0.9	0.9	1.0	50.00	14
15	4	0.0	25.00				1.0	1.7	6.3	6.5	6.8	6.9	6.9	6.9	7.0	25.00	15
16	7	0.0	28.57				0.7	3.7	5.8	6.3	6.6	6.8	, 6.9	6.9	7.0	14.29	16
17	11	0.0	9.09			0.3	1.8	2.7	4.1	4.4	4.7	4.8	4.9	4.9 5.9	5.0 6.0	18.18	18
18	35	0.0	14.29	l		0.0	2.4	3.5	4.8	5.3	5.6	5.8	5.9				19
19	90	0.0	18.89				2.2	4.0	7.6	8.0	8.7 13.1	9.4 14.0	10.1	10.8	11.0 16.0	1.11	20
20	170	0.0	15.88	l		0.0	Z. 7 Z. 7	4.7 5.2	9.1	10.5	14.3	14.0 16.1	17.5	20.6	21.0	0.41	21
21	246	0.0	14.63			0.0		6.0	9.1	12.5	18.6	20.4	22, 1	27.6	28.0	0.37	22
22	273	0.0	12.45			0.3	3.8 5.1	7. Z	10.9	14.4	19.4	21.7	24.0	28.5	29.0	0.33	ı
23	299	0.0	8.70			1.1	6.0	8.8	12.1	15.4	18.9	21.7	23.9	29.5	30.0	0.33	24
24	303	0.0	5.61	1		1.4			13.3	16.1	19.9	27.0	27.9	30.5	31.0	0.33	25
25	304	0.0	5.92	1		1.6	6.8	10.2		16.5	20.7	24.6	26.9	31.5	32.0	0.33	26
26	306	0.0	6.86			2.0	7.2	10.7	14.7			†			•	l	27
27	304	0.0	3.95	1		2.3	8.0	11.3	15.2	17.2	20.2	22.0	23.9	32.5	33.0	0.33	1 "

			TABL	E IV-3	DISTE	RIBUTIO	N OF EA	STERLY	WINDS				E	STERLY	WIND	DISTRIBU	JTION
STATI	ON:		 	SANTA	MONIC	A, CALI	FORNIA						1				
REFEI	RENCE F	ERIOD:		FEBR	JARY								S	ANTA MO	ONICA,	CALIFOR	INIA
STATI	ON ELE	VATION:		125 fee	et or 38.	1 meter	MSL						L	:	FEBRUA	RY	
STATI	ON COO	RDINATI	Cs:	34.01	deg N. 1	18.27 de	g W										
PERIO	D OF OR	SERVA:	rion:	Long I	Seach. C	alifornia Californ	Janua: ia Apri	ry 1, 19! 1 18, 19!	6-April 6-Decen	17, 1956 aber 31,	1960						
DATA	SOURCE	:					rds Cente	or					NO.	OF OBS	, FOR E	ACH LE	VEL
	-			Ashevi	Weather lle, Nor	th Carol							4		568		
PREP	ARED BY	7 :		March	all Space	Flight	nd Space Center, A physics I	Aeroball	lstics Di	vicion	ma				UNITS		
					ry 23,	962						P		m	eters/se		416
Alt. (MSL)	No. of E'ly	Min. Speed.	Pct. Freq.				UMULA			90.0	95.0	97.72	99.0	99.865	Max. Speed	Pct. Freq.	(MSL)
km	Winds 267	0.0	45.32	0.135	2, 28	15.9	50.0 0.1	68.0 0.8	84.1 1.6	1.9	2.6	3.6	5,4	6.6	7.0	0.37	km_
#fc 1	241	0.0	37, 34				0.6	1.9	4.1	5.1	7,2	8.7	9.5	13.6	14.0	0.41	1
2	163	0.0	18.40				1.6	3.1	4.6	5.5	6.7	8.2	10.3	11.7	12.0	0.61	2
3	104	0.0	25.00				1.5	3.0	5. 2	5.9	7.7	8.8	9.4	9.9	10.0	1.92	3
4	75	0.0	25.33				1.5	2.7	4.2	6.7	8.0	8.5	8.8	8.9	9.0	5.33	4
5	54	0.0	29.63				1.4	2.5	4,8	5.8	10.1	10.8	12.4	12.9	13.0	1.85	5
6	44	0.0	25.00				2.1	3.6	6. 3	7.3	12.8	16.9	17.5	17.9	18.0	2,27	6
7	43	0.0	23.26				1.5	3.0	8.0	9.3	13.4	21.0	21.5	21.9	22.0	2.33	7
8	45	0.0	.31.11				1.3	3.3	5.9	8.7	11.7	15.9	19.5	19.9	20.0	2.22	8
9	40	0.0	32.50				2.6	4.4	6.6	8.0	9.0	12.0	12.6	12.9	13.0	2.50	9
10	31	0.0	35.48				2.8	5.0	8.0	9.8	13.4	20. Z	20.6	20.9	21.0	3.23	10
11	18	0.0	33.33				1.6	3.2	8.1	10.1	13.1	13.5	13.8	13.9	14.0	5.56	11
12	4	0.0	25.00				Z.0	3,7	13.3	13.5	13.7	13.9	13.9	13.9	14.0	25.00	12
13						1											13
14																	14
15																	15
16	1	13.0	100.00												13.0	100.00	16
17	1	14.0	100.00												14.0	100.00	17
18	2	0.0	50.00					5.3	5.6	5.7	5.8	5.9	5,9	5.9	6.0	50.00	18
19	18	0.0	38.89				0.3	0.8	1.7	3.1	5.1	5.5	5.8	5.9	6.0	5.56	19
20	67	0.0	29.85				0.6	1.5	2.5	3,0	4.6	6.2	6.6	6.9	7.0	2.99	20
21	159	0.0	22.01				1.3	2.0	3.5	4,5	5,6	7.1	8,4	11.7	12.0	0.63	21
22	254	0.0	21.26				1.7	3.1	4.8	5,7	6.9	8.3	9.4	10.8	11.0	0.79	22
23	289	0.0	17.99				2.6	4.3	5.7	6.6	8.5	9.6	10.0	10.8	11.0	1.04	23
24	329	0.0	12.16			0.3	2.8	5.0	6.7	7.8	9.0	10.4	11.3	14.5	15.0	0.30	24
25	332	0.0	9.64			0.4	3, 2	5.5	8.4	10.1	11.4	12.8	14,3	14.9	15.0	1.51	25
26	339	0.0	8.85			0.6	4.3	6.2	8.9	11.0	13,3	15.3	16.3	19.5	20.0	0.29	26
27	349	0.0	6.59			1.2	5.4	7.6	10.2	11.9	14.9	16.5	19.5	25.5	26.0	0.29	27

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

			TABI	E IV-4	DIST	IBUTIÓ	n of ea	STERLY	WINDS				EA	STERLY	WIND D	ISTRIBU	TION
STATI	ON:			SANTA	MONIC	A, CAL	FORNIA						┲				
REFE	RENCE F	ERIOD:		MARC	н								5/	ANTA MO	ONICA, C	ALIFOR	NIA
STATI	ON ELE	VATION	!	125 fe	et or 38	1 meter	MSL								MARCH		-
STATI	ON COO	RDINAT	ES:	34.01	deg N, l	18.27 de	ng W										
PERIC	D OF O	SER VA	TION:				Janua					<u>-</u>		<u> </u>			
							la Apri		00-1/ecen	100F 31,	1700		T				
DATA	SOURCE):		U. S.	Weather	Bureau	rda Cent	er			•		NO.	OF OBS.		CH LEV	EL
PREP	ARED BY	(:		Nation	al Aeron		nd Space				<u></u>	-	+		620 UNITS:		
				Aeropl	hysics a:	nd Astro	Center physics I	Aeroball: Branch,	istics Di [.] Huntsvill	vision e, Alaba	ma			m	eters/se		
Alt.	No. of	Min.	Pet.	rebru	ary 23.		CUMULA	TIVE PE	RCENTA	GE FRE	COUENC	Y			Max.	Pct.	Alt.
(MSL) km	E'ly Winds	Speed.	Freq.	0.135	2, 28	15.9	50.0	68.0	84.1	90.0	95.0	97. 72	99.0	99.865	Speed	Freq.	(MSL)
afc	276	0.0	51.09					0.6	1.5	1.9	2.7	3.6	4,3	4.9	5.0	1.45	sfc
1	260	0.0	32'. 31				0.7	1.7	3, 2	4.2	5.5	7.0	8.4	11.6	12.0	0.38	1
2	203	0.0	20.69				1.5	3.0	4.8	5.6	6.5	8.4	11.4	13.7	14.0	0.49	2
3	140	0.0	23.57				1.9	4.6	6.6	8.0	10.3	11.6	12,3	12.9	13.0	1.43	3
4	89	0.0	19.10				2.3	4.4	7.1	9.0	11.5	12.4	17,1	17.8	18.0	1.12	4
5	71	0.0	19.72				2.4	3.7	6.2	8.4	13.4	14.6	16.2	16.9	17.0	1.41	5
6	64	0.0	21.88				2.1	3.9	8.2	9.5	10.9	13.5	19.3	19.9	20.0	1.56	6
7	57	0.0	21.05				3.7	5.6	8.7	9.6	11.7	15.7	21.4	21.9	22.0	1.75	7
8	45	0.0	22.22				4.1	6.9	9.9	13.5	17.3	17.9	20.5	20.9	21.0	2.22	8
9	39	0.0	17.95				6.5	9.1	12.7	14.6	16.0	18.1	18.6	18.9	19.0	2.56	9
10	33	0.0	12.12			0.2	.4.5	8.4	14.7	15.8	16.6	19.2	19.6	19.9	20.0	3.03	10
11	24	0.0	16.67				3.0	5.1	8.1	9.5	10.8	12.4	12.7	12.9	13.0	4.17	11
12	8	0.0	12.50			0.0	0.7	1.2	1.8	2, 1	2.6	2.8	2.9	2.9	3.0	12.50	12
13											!						13
14	1	8.0	100.00												8.0	100.00	14
15	1	2.0	100.00												2.0	100.00	15
16	1	1.0	100.00				1								1.0	100.00	16
17	8	0.0	37.50				0.5	1.1	1.5	1.7	1.8	1.9	1.9	1.9	2.0	37.50	17
18	15	0.0	40.00				0.3	0.8	1.5	1,8	3.2	3.6	3.8	3.9	4.0	6.67	18
19	33	0.0	21.21				0.8	1.8	3.4	3.9	4.6	5.2	5.6	5.9	6.0	3.03	19
20	97	0.0	24.74				1.2	1.9	2.9	4,4	6.3	7.3	8.0	8.8	9.0	1.03	20
21	179	0.0	16.76				1.4	2.6	4.4	5.2	6.0	7.3	8,1	8.8	9.0	1.12	21
22	251	0.0	15.14			0.0	1.9	3.1	4.9	5.6	6.6	8.5	9.3	9.9	10.0	1.59	22
23	286	0.0	14.69			0.1	2.7	4.2	.5.8	6.8	8.1	9.1	10.0	11.6	12.0	0.35	23
24	290	0.0	14.48			0.2	4.2	5.7	7.5	8.8	11.0	12.7	13.7	15.6	16.0	0.34	24
25	284	0.0	7. 75			1.0	5.4	6.9	9.5	10.8	12.9	15.3	17.0	17.8	18.0	1.06	25
26	288	0.0	7. 29			1.0	6.0	8.1	10.7	12.6	14.9	17.4	19.5	21.6	22.0	0.35	26
27	283	0.0	5.65			1.3	6.4	9.0	12.3	14.4	16.5	19.7	23,1	26.6	27.0	0.35	27

			TABI.	E IV-5	DIST	RIBUTIO	n of ea	STERLY	WINDS				E	ASTERLY	WIND D	ISTRIBU	TION
STATI	ON;			SANT	MONIC	A, CAL	IFORNIA						╁				
	RENCE F	ERIOD:		APRIL									s	ANTA MO	ONICA, O	ALIFOR	NIA
	ON ELE					1 meter	MSL								APRIL		
CT A TT	ON COOL	DINATI	78.	34 01	dea N 1	18.27 de	w W					•					
SIAIL	OM 0001	· Mitter 1		J4. VI	41, A		• "									-	
PERIO	D OF OF	SERVA	rion:	Long I Santa I	Seach. C	alifornia Californ	Janua: ia Apri	ry 1, 19! 1 18, 19!	56-April 56-Decen	17, 1956 aber 31,	1960						
DATA	SOURCE	:		U.S.	Weather		rda Cente	or					NO.	OF OBS	. FOR E.	ACH LEV	/EL
PREPA	RED BY			Nation	al Aeron	autics a	nd Space	Adminis Aerobali	tration istics Di	vision					UNITS		
				Aeropi	nysics ar try 23,	nd Astro	physics I	Branch,	Huntsvill	e, Alaba	ma			m	eters/se	cond	
Alt.	No. of E'ly	Min.	Pct.				CUMULA	TIVE PE	RCENTA	GE FRI	EQUENC	Y			Max. Speed	Pct. Freq	Alt. (MSL)
(MSL) km	Winds	Speed.	Freq.	0.135	2, 28	15.9	50.0	68.0	84.1	90.0	95.0	97. 72	99.0	99.865	<u> </u>		km ·
s fc	215	0.0	49.77				0.0	0.6	1.4	1.9	2.9	3.8	4.6	5.7	6.0	0.47	∎fc
1	252	0.0	36.51				0.4	1.2	2.5	3.2	3.9	6.4	7.2	8.6	9.0	0.40	
2	200	0.0	27.00				1.2	2.3	3.9	5.0	6.7	9.1	11.0	13.7	14.0	0.50	
3	169	0.0	11.83			0.2	2.1	3.2	5.2	5,8	6.5	7.1	10.1	10.8	11.0	1.18	3
4	130	0.0	16.15				2.3	3.7	5.3	6.5	8.2	10.5	11.7	16.8	17.0	0.77	4
5	96	0.0	19.79				1.8	3, 2	5.3	6.3	8.1	11.4	15.0	15.8	16.0	1.04	5
6	62	0.0	20.97				1.9	3.4	8.0	8.5	8.9	12.5	17.3	17.9	18.0	- 1.61	6
7	47	0.0	17.02				1.5	3.9	8.1	9.2	10.8	14.9	22.5	22.9	23.0	2.13	7
8	42	0.0	28.57				1.3	4.1	9.3	10.8	13.9	19.0	19.5	19.9	20.0	2.38	8
9	33	0.D	12.12			0.2	3.0	4.4	11.7	15.3	17.3	18.2	18.6	18.9	19.0	3.03	9
10	33	0.0	18.18				2,9	5.4	11.7	15.2	15.7	16.2	16.6	16.9	17.0	3.03	10
11	31	0.0	19.35				1.9	3.0	5.6	6.4	7.4	8.2	8.6	8.9	9.0	3.23	11
12	14	0.0	21.43				1.5	2.7	4.7	5.6	6.3	6.6	6.8	6.9	7.0	7.14	12
13	2	1.0	100.00												1.0	100.00	13
14	1	0.0	100.00												0.0	100.00	14
15																	15
16		_									1				, .	,, .	16
17	3	2.0	66.67					7.0	7.5	7.6	7.8	7.9	7.9	7.9	8.0	33.33	17
18	7	0.0	71.43					١.,	0.4	0.6	0.8	0.9 4.1	0.9	4.9	1.0 5.0	28.57	18
19	38	0.0	42.11				0.2	0.9	2.2	2.8	3.5 5.2	5.7	4.6	6.8	7.0	1.00	
20	100	0.0	24.00				1.0	2.1	3.4	3,7 4,5	5.6	6.5	6.0 8.0	8.8	9.0	1.08	21
21	186	0.0	25.27 18.97				1.5	2.5	3.8	4.7	6.4	7.4	8,3	10.6	11.0	0.43	
22	232	0.0	16.89				1.5	2.5	4.0	4.9	5.9	7.0	8.0	9.6	10.0	0.43	23
23	296	0.0	17.76				1.5	2.6	4.1	5.2	6.5	9.6	10.9	13.5	14.0	0.34	24
24	304	0.0					l	2.6	4.3	5.5	8.3	10.6	13.0	14.8	15.0	0.68	25
25	295	0.0	20.00				1.3	2.4	4.9	5.9	7.7	9.7	11.4	12.8	13.0	0.68	
26	257	0.0	21.01				1.2	2.7	5.3	6.6	8.8	10.0	10.9	11.8	12.0	0.78	l
27	214	0.0	28.04				1.4	4. /	7.3	0.0	L	10.0	10.9	11.6	12.0	V. 73	

																	0.3
			TABL	E IV-6	DIST	IBUTIO	n of ea	SŢERLY	WINDS				EA	STERLY	MIND D	ISTRIBU	TION
STATI	ON:		· · · · · · · · · · · · · · · · · · ·	SANTA	MONIC	A, CAL	FORNIA										
	RENCE F			MAY									SA	INTA MO	ONICA, C	ALIFOR	MIV
STATE	ON ELE	VATION:		125 fe	et or 38.	l meter	■ MSL					-			MAY		
STATI	ON COO	RDINATI	CS:	34.01	deg N, 1	18.27 de	g W			******		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
																	
PERIC	D OF O	BSERVA!	rion:				Janua: da Apri										
DATA	SOURCE	;					rds Cent	9 ř					NO.	OF OBS	FOR E	CH LEV	EL
				Ashev	Weather ille, Nor	th Carol		 							620		
PREP	ARED BY	7 :		March	mil Space	Flight	nd Space Center, a physics I	Aeroball	istics Di	vision le, Alaba	ma				UNITS:		
414	No. of	Min.	Pct.	Febru	ary 23,	962	CUMULA					Y		. 10	Max.	Pct.	Alt.
Alt. (MSL) km	No. of E'ly Winds	Speed.	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL)
sfc	198	0.0	43, 43				0.1	0.7	1.3	1,6	1.9	2.4	2.7	2.9	3.0	4.04	afc
1	277	0.0	35.02				0.4	1.0	1.8	2,3	2.9	4.9	5.8	6.8	7.0	0.72	1
2	183	0.0	16. 39				1.6	2.8	4.6	5,2	6.4	7.6	8.5	9.7	10.0	0.55	2
3	185	0.0	16.76				2.2	3.7	5.3	6,0	6.8	7.9	10,0	10.8	11.0	1.08	3
4	127	0.0	22.05				1.6	2.9	5.3	6.4	8.8	9.7	10.7	11.8	12.0	0.79	4
_~ 5	75	0.0	22.67				1.4	2.5	4.8	6.0	6.8	7.6	8,2	8.8	9.0	1.33	. 5
6	57	0.0	21.05				1.9	2.8	3.9	4.8	5.7	7.7	9.4	9.9	10.0	1.75	6
7	48	0.0	10.42			0.2	2.1	3.8	5.8	6.5	7.3	7.9	8.5	8.9	9.0	2.08	7
8	43	0.0	18.60	,			1.5	2.7	7.0	7.9	8.9	10.0	10.5	10.9	11.0	2.33	8
9	31	0.0	29.03		'		2.1	4.0	6.5	7.3	7.8	12.2	12.6	12.9	13.0	3.23	9
10	18	0.0	11.11			0.2 5.2	7.0	5.0 9.2	5.7 9.8	13.1	15.1 11.6	15.5 11.8	15.8	15.9	16.0 12.0	5.56 12.50	11
11	9	3.0	20.00			5.2	4.5	5.3	11.2	11,5	11.7	11.8	11.9	11.9	12.0	20.00	12
13		3,0	20.00				•	""		,,			11,,	,	10.1		13
14																į	14
15																	15
16	,2	0.0	50.00				1	3.3	3.6	3.7	3.9	3.9	3.9	3.9	4.0	50.00	16
17	17	0.0	29.41				0.7	1.3	2.0	2,4	2.7	2.8	2.9	2.9	3.0	17.65	. 17
18	67	0.0	44.78				0. Z	1.1	2.0	2,6	3.6	5.2	5.6	5.9	6.0	2.99	18
19	200	0.0	23.00				1.1	1.9	3.4	4.5	6.2	8.7	13.0	1,3.8	14.0	1.00	19
.20	339	0.0	13.57			0.1	1.6	3.1	4.6	5.6	7.7	9.6	11.8	14.7	15.0	0.59	
21	437	0.0	14.19			0.0	2.1	3.4	5.0	6.0	7.1	9.0	10.8	15.4	16.0	0.23	ŧ
22	478	0.0	11.51			0.3	2.5	3.8	5.4	6.0	7.1	9.2	12.1	15.3	16.0	0.21	l
23	492	0.0	9.76			0.4	3.0	4.7	6.2	7,3	8,6	10.7	15.0	18.3	19.0	0.20	
24	501	0.0	10.58			0.3	3.2	4.9	6.7	7.7	10.9	13.5	17.9	21.3	22.0	0.20	
25	489	0.0	10.84			0.4	3. 2	5.0	7.0	8,3	10.1	14.5 11.8	20.1 18.2	24.3	25.0 25.0	0.20	25 26
26 27	474	0.0	14.14 11.72			0.1	3.4 4.0	5.4	7.1	9.5	10.2	12.2	15.8	21.7	22.0	0.46	27
<u> </u>		1		<u> </u>		J.,				7.3						J. 78	

	-		TAB1.	E IV-7	DIST	IBUTIO	n of Ea	STERLY	WINDS				EA	STERLY	WIND D	ISTRIBU	JTION
STATI	ON:			SANTA	MONIC	A, CAL	FORNIA						,	ANTA MO	ONICA, C	CALIFOR	RNIA
REFER	ENCE P	ERIOD:		JUNE					-					IN IN INC	olitori, c	men or	
STATIO	ON ELEV	ATION:		125 fee	et or 38	l meter	MSL						L		JUNE		
STATI	ON COOF	DINATE	CS:	34.01	deg N. I	18.27 de	g W			,							
PERIO	D OF OB	SERVAT	rion:	Long I	Seach. C	alifornia Californ	Janua: ia Apri	ry 1, 195 1 18, 195	6-April 6-Decem	17, 1956 ber 31,	1960						
DATA	SOURCE	:					rds Cente	ır					NO.	OF OBS	FOR E	ACH LE	VEL
	-				Weather lie, Nor		ina								B00		
PREPA	RED BY	;	•	Marsh	all Space	Flight	nd Space Center,	Aeroballi	latica Div	dsion					UNITS	:	
				Aeropl Febru	nysics ar ary 23.	d Astro	physics I	Branch,	Huntsvill	e, Alaba	ma			m	eters/se	cond	,
Alt.	No. of E'ly	Min. Speed.	Pct. Freq.			(UMULA	TIVE PE	RCENTA	GE FRE	QUENC	Y	-		Max. Speed	Pct. Freq	Alt. (MSL
(MSL) km	Winds	speea.	rreq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865			km
ofc	162	0.0	47.53				0.0	0.5	0.9	1.3	1.7	1.9	2,4	2.9	3.0	1.85	afc .
1	260	0.0	35.38				0.5	1.2	2.3	3.0	3.7	4.6	6.2	9.6	10.0	0.38	1
2	168	0.0	27.98				0.9	1.8	3.0	3.6	5.5	6.4	6.8	7.7	8.0	0.60	2
3	183	0.0	21.86				1.7	3.0	4.5	5.3	6.5	7.9	8.7	10.7	11.0	0.55	3
4	153	0.0	23.53				2.1	3.6	5.8	6.9	8.2	9.5	10.7	12.7	13.0	0.65	'
5	136	0.0	21.32				1.9	3.8	5.7	7.3	9.0	10.4	11.6	12.8	13.0	0.74	5
6 .	129	0.0	18.60				2.0	4.2	6.4	7.5	8.8	10.0	10.8	16.8	17.0	0.78	6
7	103	0.0	12.62			0.4	3.0	5.3	7.5	8.9	10.6	14.3	14.9	18.8	19.0	0.97	7
8	97	0.0	12.37			0.3	3.4	6.3	9.5	11.3	12.5	16.7	20.0	20.8	21.0	1.03	8
9	96	0.0	13.54			0.3	3.7	7.0	10.7	11.8	14.2	21.2	21.6	21.9	22.0	3.13	9
10	92	0.0	3.26			1.0	4.7	7.5	11.3	14.8	18.4	23.9	27.0	27.8	28.0	1.09	10
11	85	0.0	8.24			0.5	4.8	8.1	12.2	17.5	21.7	29.0	30, 1	30.8	31.0	1.18	11
12	70	0.0	11.43			0.3	4.3	7.8	11.9	16.0	21.5	28.4	29.3	29.9	30.0	1.43	12
13	44	0.0	9.09			0.4	4.6	6.9	9.0	13.6	22.8	28.9	30.5	30.9	31.0	2.27	13
14	19	0.0	21.05				6.1	9.,9	13.4	21.0	22,0	22.5	22.8	22.9	23.0	5.26	14
15	17	0.0	11.76			0.7	3.6	5.5	7.4	7.7	9.1	9.6	9.8	9.9	10.0	5.88	15
16	36	0.0	27.78				0.8	1.7	5.1	6.1	7.1	7.5	7.8	7.9	8.0	5.56	16
17	102	0.0	31.37				0.7	1.6	3.5	4.5	5.9	6.6	6.9	7.8	8.0	0.98	17
18	305	0.0	19.34				1.3	2.3	3.8	5.Z	6,6	7.8	10.9	14.5	15.0	0.33	18
19	496	0.0	8.67			0.5	2.6	3.9	5.8	6.8	8.3	9.6	10.8	15.3	16.0	0.20	19
20	566	0.0	3.36			1.6	4.2	5.5	7.3	8.5	10,2	11.5	13.3	15.6	16.0	0.35	20
21	589	0.0	0.85		0.5	2.7	5.5	6.9	8.7	9.7	11.2	12.4	13.7	17.2	18.0	0.17	21
22	590	0.0	0.68		0.7	4.0	6.7	8.0	9.7	10.7	11.7	13.0	13.9	20.2	21.0	0.17	22
23	594	0.0	0.17		1.5	4.6	7.6	8.9	10.6	11.6	13.1	14.0	15.6	19.1	20.0	0.17	23
24	598	0.0	0.17		1.7	5.0	8.0	9.8	11.6	12.8	14,0	15.5	17.0	23.1	24.0	0.17	24
25	600	1.0	0.67		1.7	5.3	8.6	10.5	12.3	13.6	15,2	16.2	17.0	27.1	28.0	0.17	25
26	600	0.0	0.50		1.2	5.2	9.1	10.9	12.7	14.3	15.7	17.3	20.5	29.1	30.0	0.17	26
27	600	0.0	1.00		1.0	4.9	9.5	11.4	14.2	15,6	17.1	19.4	23.0	29.5	30.0	0.33	27

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

			TABL	E IV-8	DISTR	IBUTION	OF EAS	TERLY	WINDS				EA	STERLY	WIND D	ISTRIBU	TION
STATIO	ON:			SANTA	MONICA	A, CALI	FORNIA										
REFER	ENCE P	ERIOD:		JULY									SA	NTA MC	NICA, C	ALIFOR	NLA
STATE	ON ELEV	ATION:		125 fee	et or 38.	l meters	MSL					٠.		٠.	JULY		
STATI	ON COOF	DINATI	ES:	34.01	dog N, 1	18.27 de	g W										
PERIO	D OF OR	SERVA	rion:	Long I	Seach. Co	Llifornia	Januar a April	y 1, 195	6-April	17, 1956 ber 31.	1960						
													T NO.	OF OBS	FOR E	ACH LEY	VEL.
DATA	SOURCE	:		U. S.	al Weather	Bureau		r			•				620		
PREPA	RED BY	<u>':</u>		Nation	lle, Nort al Aeroni all Space	autics ar	d Space	Adminia	ration	inion			1		UNITS:		
				Aerop	an Space hysics an ary 23, 1	d Astrop	hysics B	ranch,	Iuntsvill	, Alaba	ma		<u> </u>	m	eters/se	cond	
Alt.	No. of	Min.	Pct.	. 401,0			UMULA	rive pe	RCENTA	GE FRE	QUENC	′			Max. Speed	Pct. Freq.	Alt. (MSL)
(MSL) km	E'ly Winds	Speed.	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Sheen		km.
afc .	142	0.0	54.93					0.3	0.8	1.0	1.7	2.3	3.2	3.9	4.0	1.41	•fc
1	275	0.0	32.36				0.6	1.3	2.4	3.0	4.0	4.7	5.6	8.8	9.0	0.73	1
2	174	0.0	31.03				0.8	1.9	3.9	4.6	5,8	6.6	7.2	14.7	15.0	0.57	2
3	217	0.0	22.12				1.3	2.7	4.4	5.4	7.3	8.5	10,4	11.7	12.0	0.46	3
4	226	0.0	17.26				1.9	3.4	5.4	6.5	7.7	8.7	9.8	10.8	11.0	0.88	1
5	224	0.0	19.20				2.4	4.1	5.9	7. Z	9.0	9.7	10.7	11.8	12.0	0.89	5
6	207	0.0	17. 39				2.7	4.3	6.7	7.7	9.6	10.6	12.3	12.9	13.0	1.45	6
7	196	0.0	12.76			0.1	2.4	3.8	6.3	7.6	8.8	10.2	13.0	13.8	14.0	1.02	7
8	173	0.0	15.61			. 0.0	2.2	4.0	5.8	6.9	8.3	9.5	10.6	13.7	14.0	0.58	8
9	142	0.0	15.49			0.0	2.5	4.5	6.2	7.1	8.9	9.7	12,5	14.8	15.0	0.70	9
10	124	0.0	13.71			0.1	2.3	3.8	5.6	7.6	9. B	12.0	12,8	13.8	14.0	0.81	10
11	111	0.0	14.41	į		0.0	2.3	3.7	6.0	7.6	10.2	12.4	13.8	15.8	16.0	0.90	11
12	98	0.0	16.33				2.3	4.7	7.1	9.3	11.0	11.9	12.5	12.9	13.0	2.04	12
13	93	0.0	19.35				2.3	3.9	6.2	7.7	11.0	11.7	12,0	12.8	13.0	1.08	13
14	96	0.0	10.42			0.2	2.5	3.9	6.0	6.7	7.7	8.9	9.5	9.9	10.0	2.08	14
15	130	0.0	20.00				2.5	3.9	6.2	7.0	7.9	8.7	9.3	9.9	10.0	1.54	15
16	229	0.0	14.41			0.0	2.1	3.5	5.3	6.2	7.2	7.8	8.8	10.6	11.0	0.44	16
17	396	0.0	12.37			0.2	2.4	3.8	5.6	6,7	7.8	9.6	10.6	12.4	13.0	0.25	17
18	533	0.0	6.94			1.1	4.0	5.3	6.8	7.9	9.3	10.3	11.1	12.2	13.0	0.19	18
19	595	0.0	2.35			2.5	5.6	7.1	8.9	9.9	10.7	11.7	12.6	14.1	15.0	0.17	19
20	615	0.0	0.49		0.6	4.4	7.2	8.7	10.2	11.1	11.8	12.9	14,1	17.1	18.0	0.16	20
21	620	0.0	0.48	ļ	1.8	5.9	8.9	10.4	11.7	12, 4	13,4	14.6	15.9	17.5	18.0	0.32	21
22	620	0.0	0.16		3.5	7.4	10.3	11.5	13.1	14.0	15,0	15.9	16.8	21.1	22.0	0.16	22
23	620	1.0	0.16		5.0	8.5	11.6	, 12.7	14.2	14.9	16.0	17.5	18.4	21.1	22.0	0.16	23
24	620	1.0	0.32	1	5.1	9.9	12.6	14.0	15.7	16.4	17,2	18.2	19.2	21.5	22.0	0.32	24
25	620	1.0	0.32	I	6.0	10.3	13.4	15.0	16.6	17.5	18.6	19.9	20.9	25.1	26.0	0.16	25
26	620	1.0	0.16	1	6.5	10.9	14.4	15.9	17.6	18.5	20.0	21.4	22.5	25.7	26.0	0.48	26
27	618	1.0	0.16		7.7	11.5	15.1	16.7	19.1	20.0	21.4	23.3	25.9	27.1	28.0	0.16	27
-1	018	1 "."	1 ".1"	I	' '	,	L	1	L	1	1		L	1	1	1	1

			TABI	E IV-9	DIST	RIBUTIO	N OF EA	STERLY	WINDS				E	ASTERLY	WIND	ISTRIBU	JTION
STATI	ON:			SANT	A MONIC	A, CAL	IFORNIA		 				T	A 5198 4 5 4			
REFE	RENCE F	ERIOD:		AUGU	ST								s.	ANTA M	ONICA, O	ALIFOR	INLA
STATI	on ele	VATION:	: .	125 fe	et or 38	1 meter	s MSL								AUGUST		
STATI	ON COO	RDINATI	ES:	34.01	deg N,	18.27 de	g W										•
PERIC	D OF OF	SERVA	TION:				Janua ia Apri										
DATA	SOURCE						rds Cent						NO.	OF OBS.	FOR E	CH LEV	/EL
						Bureau	ina								620		
PREP.	ARED BY	r:		Nation	al Aeror	unutice a	nd Space			ulaton.					UNITS		
				Aerop		nd Astro	Center, physics 1				ma			m	eters/se	cond	
Alt.	No. of	Min.	Pct.				CUMULA	TIVE PI	RCENT	AGE FRI	QUENC	Ÿ		,	Max. Speed	Pct. Freq.	Alt. (MS)
MSL) km	E'ly Winds	Speed.	Freq.	0.135	2.28	15.9	50.0	68.0	84. I	90.0	95.0	97.72	99.0	99.865			km
s fc	145	0.0	55.17					0.4	1.1	1.5	1.8	1.9	2.5	2.9	3.0	2.07	ofc
1	306	0.0	31.05				0.6	1.4	2.4	2.9	3.7	5.0	5.7	6.7	7.0	0.65	1
2	195	0.0	31.79				0.8	1.7	3.1	4.2	5,7	7.1	7.7	8.7	9.0	0.51	
3	223	0.0	22.87				1.3	2.6	5.0	5.7	6.9	7.8	8.8	11.6	12.0	0.45	
4	208	0.0	23.08				1.6	3.1	5.2	6.3	8,5	11.2	11.7	13.7	14.0	0.48	
5	196	0.0	28.06				1.2	3.0	5.3	6.7	9.4	10.8	12.0	13.7	14.0	0.51	'
6	177	0.0	23.16				1.5	3.1	5.5	6,5	7,8	9.9	11.2	13.7	14.0	0.56	'
7	157	0.0	22.29				1.8	3.9	5.8	7.0	8,6	12.2	16.4	17.7	18.0	0.64	
8	138	0.0	19.57				1.7	4.0	6.4	8.0	8.7	9.9	13.6 14.8	14.8	15.0 17.0	0.72	8
9	120	0.0	24.17				2.0	4.2	7.1	8.1	8.8	11.6 12.5		16.8 22.8	23.0	0.83	10
10	106	0:0	21.70				2.4	4. 7 5. 0	8.1 9.2	9.1	10.6 13.3	18.8	16.9 23.0	23.8	24.0	1.08	1:
11	93	0.0	17.20				2.7	6.6	9.2	11.1	12.8	21.5	30.1	30.8	31.0	1.15	12
12	87	0.0	18.39				3.5	5.4	7.6	8.9	11.6	12.5	13.1	13.8	14.0	1.20	1:
13	83	0.0	18.07				3.0 2.6	4.8	8.0	8. 6	9.5	15.2	16.2	16.8	17:0	1.28	14
14 15	78 99	0.0	16.67 14.14			0.0	1.9	2.9	4.6	5.5	7.0	8.7	11.0	11.8	12.0	1.01	1:
16	163	0.0	23.31			•••	1.3	2.6	4.4	5,3	6.3	7.6	8.4	8.9	9.0	1.84	10
17	340	0.0	15.29			0.0	1.6	2.7	4.2	5.0	5.9	6.8	7.6	9.7	10.0	0.59	11
18	511	0.0	8.81			0.4	2.6	3.9	5.3	6, 1	7.1	B. L	8.9	12.3	13.0	0.20	10
19	590	0.0	4.07			1.8	4.5	5.7	7.2	7.9	8.8	9.7	10,4	15.2	16.0	0.17	1
20	608	0.0	1.64		Ø. 2	3.0	6.2	7.6	9.1	9.9	10.9	11.6	12.7	15.1	16.0	0.16	20
21	620	0.0	0.48		1.2	4.8	8.0	9.3	10.7	11,4	12.5	13.6	14,5	15.7	16.0	0.48	2
22	619	2.0	0.97		3. 1	6.6	9.9	11.0	12.4	13.2	14.4	15.4	16.2	19.1	20.0	0.16	22
23	620	0.0	0.16		4.6	7.9	11.0	12.4	13.9	14.7	15.7	16.8	17.9	26.1	27. 0	0.16	2:
24	620	4.0	0.32		5.5	9.1	12.3	13.8	15.1	15.8	17.0	18.4	19.6	25.5	26.0	0.32	24
25	620	3.0	0.16		6. 3	10.1	13.2	14.8	16.4	17.0	18.1	19.8	20.9	26.1	27.0	0.16	Z!
26	620	5.0	0.32		6.5	10.4	14.0	15.5	17.3	18.4	19.5	20.6	23,4	27.5	28.0°	0.32	26
27	620	4.0	0.16		6.4	11.0	14.7	16.2	18.1	19.5	20,8	22.4	24.6	30.1	31.0	0.16	27

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			TAB	LE IV-10	DIST	ributi	on of E	ASTERL	Y WINDS				Е	ASTERL	Y WIND	DISTRIĄ	UTION
STAT	ION:			SANT	A MON	CA, CAI	IF ORNI	A		~~,							
	RENCE		·		EMBER									ANTA M	ONICA,	CALIFO	RNIA
STAT	ION ELE	VATION	1;	125 f	set or 38	. 1 mete	rs MSL		1					s	ЕРТЕМІ	BER	
STAT	ION COC	RDINAT	ES:	34.01	deg N,	118.27 d	leg W					·					
PERIO	D OF O	BSERVA	TION:	Long	Beach.	Californi	a Janua	ry 1, 19	56-Apri	17. 195	6					•	·
				Santa	Monica.	Califor	nia Apr	11 18, 19	56-Dece	mber 31	. 1960						
DATA	SOURCI	E:		U. S.	Weathe	her Reco r Bureau		ter			,		NO.	OF OBS	, FOR E	ACH LE	VEL
PREP	ARED B	Y :		Natio	nal Asro	rth Caro	nd Space	Admini	etration						600		
			-	Marel Aerop	hall Spac	e Flight and Astro	Center	Aeroball Branch,	listics D	ivision lle, Alab	êma		ſ	n	UNITS neters/se		
Alt.	No. of	Min.	Pct.		., .,		CUMULA	TIVE P	ERCENT	AGE FR	EQUENC	Y			Max.	Pct.	Alt.
(MSL) km	E'ly Winds	Speed.	Freq	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97. 72	99.0	99.865	Speed	Freq.	{MSL
#fc	216	0.0	51.85					0.5	1.1	1.5	1.9	2.6	3.2	3.9	4.0	1.39	øfc
1	279	0.0	37.63				0.5	1.4	2.5	3.2	3.8	4.4	4.B	6.6	7.0	0.36	1
2 a	222	0.0	22.97]		1.3	2.5	4.2	5.4	6.7	7.7	10.3	11.7	12.0	0.45	2
3	225	0.0	12.00			0.3	2.7	4.1	5.8	7.3	8.5	9.9	11.8	13.6	14.0	0.44	3
4	193	0.0	18.13				2.2	4.0	6.4	7.3	8.2	9.5	11.0	11.8	12.0	1.04	1 4
5 6	169	0.0	19.53				2.2	3.4	4.9	6.1	7.1	8.5	9.4	9.9	10.0	1.78	5
7	144	0.0	15.97 16.67				2.4	4.4	6.2	6.7	7.9	8.9	9.7	10.8	11.0	0.69	6
8	107	0.0	8.41			1.0	3.2	6.2	7.4 8.8	8.3 10.2	9.9	10.7	11.7	19.8	20.0	0.79	7
9	98	0.0	6. 12			0.8	3.5	6.0	9.1	11.0	11.7	12.5	12.9	14.8	15.0 14.0	0.93 1.02	8 9
10	88	0.0	9.09	-		0.6	3.6	6.8	10.0	11.4	12.3	15.9	18.5	18.9	19.0	2.27	10
11	65	0.0	10.77			0.3	4.1	9.7	13.7	15, 2	18.7	23.2	23.6	23.9	24.0	3.08	11
12	49	0.0	6. 12			0.7	5.1	10.6	13.4	15.0	16.2	16.9	26.5	26.9	27.0	2.04	12
13	31	0.0	6.45			0.9	6.2	8.3	12.5	13.8	18,2	18.6	18.6	18.9	19.0	6.45	13
14	28	0.0	14.29			0.2	4.0	7.0	9.8	12,1	13,6	14.3	14.7	14.9	15.0	3. 57	14
15	34	0.0	26.47	İ			1.2	3.5	7. 7	9.7	11.4	11.7	11.8	11.9	12.0	8.82	15
16	39	0.0	28.21				1.7	2.9	4.9	6.3	7.0	8.1	8.6	8.9	9.0	2.56	16
17	114	0.0	19.30				1.1	2.1	3.7	4.6	5.8	B. Z	8.9	9.8	10.0	0.68	17
18	240	0.0	21.67				1.3	2.3	4.0	5,0	6.5	8.5	10.6	14.6	15.0	0.42	18
19	381	0.0	16.27				1.6	2.7	4.4	5.3	6.2	7.7	9.0	10.7	11.0	0.52	19
20	536	0.0	13.64			0.1	2.3	3.6	5.2	6.1	6.8	7.9	9.2	17.3	18.0	0.21	20
22	536 556	0.0	8.58 4.50			0.6	3.3	4.7	6.2	6.9	8.1	9.3	9.8		12.0	0.19	21
23	565	0.0	2.83			1.2	4.4 5.1	5.8	7.2	8.1		10.1	11.1	12.7	1	0.54	22
24	572	0.0	2.27	l	0.0	2.2	5.9	6. 7 7. 4	9.4	9.5	10.5		12.5	ı	1	0.18	23
25	572	0.0	2.27		0.0	2.3	6.3	8.0	10.1	10.3	12.6		14,7 16,3	21.2 18.2		0.17	24
26	572	0.0	2. 27	ļ	0.0	2.3	6.6	8.3	10.6	11.7	12.9		16.3	17.6		0.17	25
27	558	0.0	2. 33	,	_	2.2	6.6	8.7	10.9	11.8	14.5	Į.	16.9	19.2		0.35	26 27
			at freque		_												

		Ţ	TABI	E IV-11	DISTR	IBUTIO	N OF EA	STERLY	WINDS	•			E/	ASTERLY	WIND D	ISTRIBU	TION
STATI	ON:			BANT	MONIC	A, CALI	FORMIA							ANIMAN	NICA C		NTA
REFE	RENCE I	PERIOD:		осто	BER									ANTA MO	MICA, C	ALIFOR	AIN
STATE	ON ELE	VATION:		125 fe	et or 38	l meter	MSL								OCTOBE	:R	
STATI	ON COO	RDINATI	CS:	34.01	deg N, 1	18.27 de	g W	•									
PERIC	D OF O	SERVA	ION:	Long l	Beach. C Monica,	alifornis Californ	Janua: ia Apri		6-April 6-Decen								
DATA	SOURCE	i			al Weath Weather		rde Cente	г				,	NO,	OF OBS.		CH LEV	ÆL
				Ashev	lle, Nor	th Carol	ina nd Space	Adminia	tration				+		UNITS:	<u> </u>	
PREP	ARED BY	f 7		March	ali Space hysics ar	Flight of Astro	Center, A	Aeroballi	latica Div	vicion e, Alaba	ma		1	· m	eters/se		
414	No. of	Min.	Pct.	Febru	ry 23, 1	962	UMULA	-	<u></u>	<i>,</i>		·	ــــــــــــــــــــــــــــــــــــــ		Max.	Pct.	Alt.
Alt. (MSL)	E'ly Winds	Speed.	Freq.	0.135	2, 28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq	(MSL) km
km sfc	272	0.0	46. 32		-1		0, 1	0.6	1.1	1.5	1.8	2.3	3,0	3.8	4.0	1, 10	øſc
1	330	0.0	29.70				0.8	1.7	2.9	3.8	4.8	6.0	6.9	8.5	9.0	0.30	1
2	342	0.0	18.71				1.7	3.0	4.5	5.3	6.3	7.5	9.1	10.5	11.0	0.29	2
3	322	0.0	13.66			0.1	2.2	4.0	5.8	6.9	9.2	11.5	13.4	16.5	17.0	0.31	3
4	242	0.0	19.83				2.0	3.7	6.2	7.8	10.3	12.4	13.7	17.6	18.0	0.41	4
5	189	0.0	22.22				2.1	4,1	7.3	8.6	10.3	11.5	16.1	16.7	19.0	0.53	5
6	162	0.0	20.37				2.3	4.7	8.2	9.7	11.9	12.8	15.3	17.7	18.0	0.62	6
7	144	0.0	13.19			0.2	3.3	6.1	10.5	12.0	13.2	14,8	18.5	34.8	35.0	0.69	. 7
8	138	0.0	10.87			0.3	3.8	6. B	9.6	11.7	15,3	16.6	17.3	17.9	18.0	1.45	8
9	118	0.0	5,08			1.3	6.0	8.5	11.1	13.7	15.5	18.3	21.8	22.8	23.0	0.85	9
10	113	0.0	12.39			0.4	5.3	8.5	12,3	14.2	17.1	18.4	19.8	22.8	23.0	0.88	10
11	100	0.0	10.00			0.8	5.3	7.8	11.6	15.0	17.3	19.7	23.0	23.8	24.0	1.00	11
12	84	0.0	13.10			0.2	4.0	8.4	12.6	15.1	20,8	23.5	24.1	24,8	25.0	1.19	12
13	59	0.0	8.47			1.1	6.2	10.0	13.8	16.3	23.5	24.6	25.4	25.9	26.0	1.69	13
14	47	0.0	10.64			1.0	5.7	10.4	14.5	19.2	20.8	22.9	23.5	23.9	24.0	2.13	14
15	42	0.0	14.29			0.1	4.5	7.5	12.6	15.3	16.9	21.0	21.5	21.9	22.0	2.38	15
16	40	0.0	15.00			0.0	3.3	5.7	10.5	12.0	17.5	18.0	18,6	18.9	19.0	2.50	16
17	47	0.0	27.66				1.3	3.3	7.1	9.2	15.6	16.9	18.5	18.9	19.0	2.13	-17
18	9Z	0.0	27.17				0.7	1.6	3,0	3.9	6.4	10.4	12.0	12.8	13.0	1.09	18
19	141	0.0	29.08				1.2	, 2.2	3.4	4.2	5.3	6.3	7.5	9.8	10.0	0.71	19
20	202	0.0	21.78			ŀ	1.2	2.3	4.1	5.1	6.4	8.3	8.9	14.7	15.0	0.50	20
21	248	0.0	22.98				1.3	2.4	3.8	4.7	6.2	8.3	9.5	12, 6	13.0	0.40	21
22	270	0.0	22. 22				1.4	2.6	4.6	5.5	6,5	7.7	8.5	12.6	13.0	0.37	22
23	249	0.0	15.26			0.0	1.8	3.3	4.8	5.5	6.2	6.7	7.2	8.6	9.0	0.40	23
24	253	0.0	24.11				1.6	2.9	4.8	5.5	6.3	6.8	7,3	7.9	8.0	1.58	24
25	223	0.0	16.14				1.6	3.0	4.9	5.7	6.9	7.8	8.4	8.9	9.0	1.79	25
26	203	0.0	18.23				1.7	2.9	5.4	6.9	7.8	9.3	9.9	10.8	11.0	0.99	26
27	176	0.0	18.18		L		1.8	3.5	5.5	6.7	9.6	10.9	11.5	11.9	12.0	2.27	27

			TABL	E IV-12	DIST	RIBUTIO	N OF EA	STERLY	WINDS				EA	STERLY	MIND D	ISTRIBU	MOIT
STATI	ON:			SANT	A MONIC	A, CAL	FORNIA	*									
REFE	RENCE F	ERIOD:			MBER								S	ANTA MO	ONICA, C	ALIFOR	CNLA
STATI	ON ELE	VATION:	;	125 fe	et or 38.	l meter	MSL	•					L	N	OVEMBE	R	
ITATE	ON COO	RDINAT	CS:	34.01	deg N, 1	18.27 de	g W			•							
PERIC	D OF O	SERVA	TION:				Janua: ia Apri										
DATA	SOURCE	i:		U. S.	al Weath Weather	Bureau	rds Cent	r .				-	NO.	OF OBS.	FOR EA	CH LEV	/EL
PREP	ARED BY	ſ:	 -	Nation Marsh Aerop	al Aeron all Space hysics as	autics as Flight ad Astro	nd Space Center, physics I	Aeroball	intics Di	vision s, Alaba	.ma			m	UNITS:		
Alt.	No. of	Min.	Pet.	Febru	ary 23,		CUMULA	TIVE P	RCENT	AGE FRE	QUENC	Y			Max.	Pct.	Alt.
(MSL)	E'ly Winds	Speed.	Freq.	0.135	2,28	15.9	50.0	68.0	B4. 1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL) km
km s£c	348	0.0	34.20	<u> </u>		12.7	0.4	0.9	1.6	1.8	2,3	2.9	3.7	4.7	5.0	0.57	ofc
1	311	0.0	27. 33				0.8	1.8	3, 2	3,8	5.6	6.9	7.9	10.75	11.0	0.32	1
2	307	0.0	13.68			0.1	1.9	3.3	5.0	6.0	7.7	9.5	10.4	18.5	19.0	0.33	2
3	249	0.0	15.66			0.0	2.7	4.1	5.8	6.7	7.6	9.1	10.7	17.6	18.0	0.40	3
4	209	0.0	15.79			0.0	2.4	4.0	5.7	6.6	8.5	11.2	12,6	29.7	30.0	0.48	4
5	190	0.0	17.37				2.1	4.3	6.7	8.Z	10.1	11.4	13.1	18.7	19.0	0.53	5
6	160	: 0.0	18.12	j			2.1	4.4	7.2	9.5	11.6	12.6	13,4	18.7	19.0	0.62	6
7	131	0.0	12.98	l		0.2	3.1	5.5	9.0	11.3	13,7	16.3	16.8	18.8	19.0	0.76	7
8	116	0.0	12.07			0.3	3.6	6.8	10.3	12,4	16, 1	19.3	20,8	24.8	25.0	0.86	8
9	108	0.0	9. 26			0.4	2.9	5.5	9.2	14.2	18.3	22,2	22.9	27.8	28.0	0.93	9
10	99	0.0	18.18				3.1	5.1	11.0	14.0	17.0	18.7	22,5	22.9	23.0	2.02	10
11	73	0.0	21.92	•			2.9	6.8	12.5	13.9	16.3	20.1	20,6	20.9	21.0	2.74	11
12	56	0.0	19.64				3.4	8.2	11.0	12,3	13.7	16.7	17,4	17.9	18.0	1.79	12
13	45	0.0	17.78	i ·			2.4	4.8	9.6	14.5	19.7	20.9	21,5	21.9	22,0	2.22	13
- 14	55	9.0	20.00				2.6	4.6	7.6	12.2	19.1	19.8	22.4	22.9	23.0	1.82	14
15	51	0.0	15.69	ĺ		0.0	3.1	5.4	8.4	10.8	15,4	20.8	21.4	21.9	22.0	1.96	15
16	55	0.0	10.91			0.3	3. I	4.3	6.6	7.8	9,2	13.7	15.4	15.9	16.0	1.82	16
17	67	0.0	13, 43			0.1	1.8	:,3.4	4.7	6.0	6.7	9.4	10.3	10.9	11.0	1.49	17
18	88	0.0	17.05				2.3	3.0	4.8	5.5	6.5	7.9	10,1	10.8	11.0	1.14	18
19	126	0.0	18.25	l			1.8	3.4	5.3	5.9	6.9	7.6	7.9	8.8	9.0	0.79	19
20	170	0.0	20.00			. ,	1.5	2.8	4.9	6.3	7,1	8.7	9.6	12.7	13.0	0.59	20
51	179	0.0	17.88				1.9	3.5	5.5	6.4	8.0	9.4	11,2	12.7	13.0	0.56	21
22	193	0.0	18. 13	•			2.1	3.7	5.5	6.4	8.0	11.1	12.0	12.8	13.0	1.04	22
23	198	0.0	17.68	l			2.2	4.0	5.6	6.6	9.0	11.6	14.0	14.8	15.0	1.01	23
24	190	0.0	12.11	•		0.2	2.5	4.0	6.4	8,0	10.1	11.8	15.0	15.8	16.0	1.05	24
25	176	0.0	15.34	1		0.0	2.8	4.9	6.7	8.5	10,1	12.9	14.1	14.8	15.0	1.14	25
26	156	0.0	8.97	1		0.4	2.9	6.2	8.3	10.3	13,1	15.7	17.4	21.7	22.0	0.64	26
27	154	0.0	16.23				3.4	6.4	9.5	11.3	15.1	18,2	19.4	20.7	21.0	0.65	27

,			TABL	E [V-13	DIST	IBUTIO	n of Ea	STERLY	WINDS				EA	STERLY	WIND D	ISTRIBU	TION
STATI	ON:			SANTA	MONIC	A, CAL	FORNIA							NTA M	ONICA, C	EOTUTA:	NIA
REFE	rence f	ERIOD:		DECE	(BER									LITTA MI	MICA, C	ALLI OR	.,,,,,
STATI	ON ELE	VATION:		125 foc	nt or 38.	l meter	MSL					•		. D	ECEMBI	R	
STATI	ON COO	RDINATI	ES:	34.01	deg N. 1	18. 27 de	g W										
PERIC	D OF O	SERVA"	rion:	Long P	leach, C	alifornis Californ	Januar ia Apri	ry 1, 195 1 18, 195	ió-April ió-Decen	17, 1956 abor 31,	1950			7			
DATA	SOURCE	it					rde Cente						NO.	OF OBS	, FOR E	ACH LE	VEL
				Ashevi		th Carol									620		
PREP	ARED BY	li.			. 11 6	- T11	nd Space Center,	a aball	iatina Dii	vision					UNITS:		
				Aeropi	yeice at	rd Astro	physics I	branch,	Huntsvill	e, Alaba	ma.			m	eters/se	cond	
Alt.	No. of	Min.	Pet.				CUMULA	TIVE P	RCENT	GE FRE	QUENC	Y			Max. Speed	Pct.	Alt. (MSI
MSL) km	E'ly Winde	Speed.	Freq.	0.135	2, 28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865			km
eic	386	0.0	33.16		military .		0.4	0.9	1.6	1,6	2.3	2.7	2.9	3.7	4.0	0.52	•fc
1	376	0.0	22.34				1.2	2.2	4.1	5.1	6.7	7.8	9.6	13.4	14.0	0.27	1
2	338	0.0	15.68			0.0	2.1	3.8	6.0	7.0	8,2	10.0	11.8	14.7	15.0	0.59	2
3	267	0.0	13.48			0.1	2.9	4.6	7.1	9.3	11.3	12,4	13, 6	16.8	17.0	0.75	3
4	219	0.0	13.70			0.1	2.6	5.2	7.6	9.0	11.4	12.6	17.4	22.7	23.0	0.46	4
5	181	0.0	17.13				3.2	5. 8	8.7	9.9	12.4	14.9	17.1	19.7	20.0	0.55	5
6	161	0.0	13.04			0.2	4.3	6.9	9.7	11.7	13.6	15.4	18.3	23.7	24.0	0.62	6
7	150	0.0	13.33			0.2	4.1	7.1	10.8	13,6	15.Z	18.5	20.5	27.7	28.0	0.67	7
8	151	0.0	11.26			0.4	3.8	7.6	12.3	15.9	18.1	22.5	31.4	33.7	34.0	0.66	8
9 .	136	0.0	11.03			0.5	5.3	8.9	14.1	16.1	20.0	21.4	23,6	24,8	25.0	0.74	,
10	118	0.0	11.02			1.0	6.3	11.0	17.0	19.5	25.0	27.6	28.6	30.8	31.0	0.85	10
11	107.	0.0	9.35			1.5	6.2	9.1	13.9	17, 1	21,2	23.2	23.9	24.8	25.0	0.93	11
12	80	0.0	12.50			0.4	3.8	5.8	10.6	13,5	17.6	21.1	24.2	24.8	25.0	1.25	12
13	45	0.0	17.78				2.9	4.5	6.4	7, 1	7.9	13.9	22.5	22.9	23.0	2.22	13
14	28	0.0	32.14				1.6	2.8	3.8	5.0	5,8	7.3	7.7	7.9	8.0	3.57	14
15	30	0.0	30.00			ł	1.0	2.2	4.0	4.6	6.5	9.3	9.7	9.9	10.0	3. 33	15
16	29	0.0	34 - 48				0.5	1.1	3.6	6.1	7.2	7.6	7.8	7.9	8.0	6.90	16
17	51	0.0	39.22				0.6	1.5	2.9	4.8	5.6	5,9	6.4	6.9	7.0	1.96	- 17
18	61	0.0	23.46				1.1	2.1	3.5	4,1	4,8	5.3	5.7	5.9	6.0	3.70	16
19	127	0.0	24, 41			1	1.5	2.8	4.2	5, 2	6, 3	7.1	11.3	11.9	12.0	1.67	19
20	203	0.0	21.67				1.2	2.5	4.4	5.5	7.4	9.3	10.9	12.7	13.0	0.49	20
21	264	0.0	15.53			0.0	.2.0	3.6	5.3	6,5	8.7	11.4	14.1	16.6	17.0	0.38	21
22	312	0.0	13.14			0.1	2.4	4.4	6.7	7.9	10,0	10.9	12.8	14.5	15.7	0.32	22
23	326	0.0	11.35			0.3	3.1	4.8	7.3	8.6	10.7	12.6	14.7	15.8	16.0	0.92	23
24	314	0.0	13.06			0.2	3.6	6.1	8.6	10.1	₹‡.5	13.4	15.4	18.7	19.0	0.64	24
25	206	0.0	9.79			0.5	4.6	7.1	10.2	11.8	13.6	14.6	15.5	19.6	20.0	0.35	25
26	262	0.0	11.45	•		0.4	5.3	8.0	10.6	12.9	15.9	17.8	19.3	23.6	24.0	0.38	26
27	Z40	0.0	12.92	Į		0.3	5.2	8.1	11.6	12.9	17.0	18.8	20.5	20.9	21.0	2.08	27

NOTE: (i) When the percent {requency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

TABLE V

Page

Distribution of Westerly Winds

(Component from the west semiplane)

Unit: meters per second

Table V-l	 Annual
Table V-2	 January
Table V-3	 February74
Table V-4	 March
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Table V-12	 November
Table V-13	December

			TAB	LE V-1	DIST	RIBUTIC	ON OF W	ESTERL	Y WINDS				wı	ESTERLY	WINDE	ISTRIB	JTION
STATI	ON:	•		SANT	MONIC	A, CAL	IFORNIA		<u> </u>				T	. :			
REFE	RENCE F	ERIOD:		ANNU	AL				,				5	ANTA NO	ONICA, C	CALIFOR	(NJA
STAT	ON ELE	VATION:		125 fe	et or 38	l meter	a MSL						L		ANNUAL		
STATI	ON COOF	DINATI	ES:	34.01	deg N, l	16.27 de	g W										
PERIC	D OF OF	SERVA	TION:	Long I	Beach C Monica	aliforni Californ	Janua da Apri	ry 1, 19! 1 18, 19!	66-April 66-Decen	17, 1956 aber 31,	1960						
DATA	SOURCE	:					rds Cent	er					NO.	OF OBS	FOR E	ACH LE	VEL
				Ashev	Weather lile, Nor	th Carol								_	7308		
PREP	ARED BY	' :		March	all Space	Flight	nd Space Center,	Aeroball	istics Di	vision					UNITS	•	
	والمنطقة حسي			Aerop Febru	hysics ar ary 23,	962	physics l							ın	eters/se	_	
Alt. (MSL)	No. of W'ly	Min. Speed.	Pct. Freq.				CUMULA							Γ.	Max. Speed	Pct. Freq.	Alt (MSI
km	Winds		<u> </u>	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99 865	16.0	0.00	km
sfc	4318	0.0	28.35				1.3	2.4	3.8	4.5	5.3	6.2	7,3	12.0	16.0	0.02	sfc .
1	3837	0.0	28.69				0.8	1.7	3.1	3.9	5.4	7.2	9.5	13.6	21.0	0.03	2
2	4615	0.0	13.69			0.1	2.6	4.2	6.4	7.7	9.6	11.4	13.6	18.9	23.0	0.02	
3	4932	0.0	8.94			0.8	4.5	6.9	10.2	12.0	14,5	16.9	19.3	25. 4 32. 7	34.0 46.0	0.02	3
4	5378	0.0	6.75	,		1.2	5.8	9.0	13.3	15.7	18.8	21.8	24.8		47.0	0.04	5
5	5685	0.0	5.52			1.7	7.2	10.9	15.5	18.8	22.7	27.0	37.3	42. I		0.03	6
6	5904	0.0	4.22			2.2	8.6	12.7	18.4	21.9	26.6	31.6		50.0	58.0		,
7	6070	0.0	3.41			2.8	10.2	14.7	20.8	24.8	30.3	36.4	43,7	59.9	70.0	0.02	8
8	6176	0.0	2.61			3.7	12.0	16.8	23.8	28.2	34.2 38.1	41.2	49.7 53.3	65.6 65.4	80.0 86.0	0.02	9
9	6319	0.0	1.98		0.1	4.5	13.8	19.1	26.6	34.6	41.7	49.7	56.7	73.1	85.0	0.02	10
10	6431	0.0	1.66		0.3	5.6	15.9	21.7	32.2	37.3	44.4	54.4	61.4	76.0	87.0	0.02	111
11	6577	0.0	1.37		0.4	6.6	18.0	25.2	33.0	37.5	45.0	54.0	61.2	75.2	86.0	0.01	12
12	6742	0.0	1.02		0.8	7.6	19.1	24.6	31.7	35.9	42.0	48.8	55.0	69.6	80.0	0.01	13
13	6896	0.0	1.09		0.8			22.6	28.7	32.4	37.4	43.4	49.4	60.3	69.0	0.01	14
14	6953	0.0	0.99 1.46		0.4	7.3 6.1	17.6	19.3	24.7	27.8	32,2	37.2	42.3	51.7	63.0	0.01	15
15	6706	0.0	2.19		0.4	4.4	12.1	16.3	21.0	23.7	27.6	31.2	36, 1	44.9	51.0	0.01	16
16	6152	0.0	3.82		0,0	2.6	9.4	13.2	17.4	19.7	23.1	27.4	30,7	37.7	42.0	0.02	17
18	5332	0.0	6.04			1.7	7.1	10.1	13.9	16.2	19.2	22.9	26.2	31.2	39.0	0.02	18
19	4476	0.0	6.46			1.1	5, 1	7.5	10.9	13,1	16.1		21.8	29.4	35.0	0.02	19
20	3690	0.0	10.19			0.4	3.6	5.9	8.9	10.9		16.9		1	32.0	Q. 05	20
21	3047	0.0	12.47	•		0.2	2.9	5.2	B. 2	10.3		16.5	20,5	1	30.0	0.10	21
22	2663	0.0	14. 31			0.1	2.7	5.0	7.9	10.0		17.3	21.3		31.0	0.04	22
23	2476	0.0	11.55			Q. 3	3.1	5,4	B. 3	10.3		18.8			31.0	0.04	23
24	2415	0.0	11.51			0.3	3.7	6.4	.9.5	11.9		19.8		1	31.0	0.04	24
25	2509	0.0	LD. 44			0.5	4.3	7.0	10.8	13.8		21.5		1	34.0	0.08	25
26	2614	0.0	B. 26			Q. 8	5.3	8.6	13.1	16.0		24.8			41.0	0.04	26
27	2759	0.0	6.67			1.1	6.3	l .	15.3	18,5		21.7		39.2	50.0	0.04	27
		1	1			L	L	L							L	L	<u>ا ــــــــــــــــــــــــــــــــــــ</u>

NOTE: (1) When the percent frequency of minimum speed exceeded 2.26 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

			TAB	FE A-S	DIST	RIBUTIC	N OF W	ESTERL	Y WINDS				w	ESTERLY	WINDI	DISTRIB	MOIT U
STATI	ON:			SANT	MONIC	A, CAL	IFORNIA						┲				
REFE	RENCE I	ERIOD:	<u>.</u>	JANU	ARY						,. , , , , , , , , , , , ,		s	ANTA M	ONICA, O	CALIFO	NIA
STAT	ON ELE	VATION:		125 fe	et or 3F	l meter	■ M5L						L	J	ANUARY	?	
STATI	ON COO	RDINATI	ES:	34.01	deg N, 1	18.27 de	g W										
PERIO	D OF OF	SERVA	TION:						56-April 56-Decen								
DATA	SOURCE	:					rds Cente	er.					NO,	OF OBS	FOR E	ACH LE	VEL
					Weather		ina								620		
PREP.	ARED BY	7:		March	all Space	Flight	nd Space Center,	Aeroball	istics Di	vision					UNITS		
				Aeropi Febru	hysics at ary 23,	nd Astro 1962	physics I	Branch,	Huntsvill	le, Alaba	ma			ıπ	eters/se	cond	
Alt. (MSL)	No. of W'ly	Min. Speed.	Pct. Freq.			(CUMULA	TIVE PE	ERCENT	AGE FRI	QUENC				Max. Speed	Pct. Freq.	Alt (MSI.
km	Winds			0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99 165		0.30	kın
sfc	254	0.0	42.91				0.4	1.5 2.0	3.4	3.4 4.5	4.1 6.7	4.7 10.6	6.2	9.6	10.0	0.39	#fc
1	314	0.0	22.61				1.1	1,1.9	14.5	15.0	0.32	1					
2	421	0.0	11.64			0.3	4.0	14.9	20.4	21.0	0.24	2					
3	526	0.0	3.23			2.1	6.7	9.4	21.2	25.6	26.0	0.38	3				
4	559	0.0	2.15	'	0.0	3.2	8.8	12.6	26.2	28.6	30.6	31.0	0.36	4			
5	577	0.0	1.56		0.4	4.2	11.5	15.6	21.4	24.0	28.3	32.3	35.1	39.2	40.0	0.17	5
6	582	0.0	0.86		0.6	5.8	13.9	18.4	24.8	27.8	32.6	34.9	39.0	57.2	58.0	0.17	6
7	583	0.0	1.03		1.3	7.3	15.8	20.8	27.8	31.1	36.1	43.3	52,1	69.2	70.0	0.17	7
8	583	0.0	0.51		2.0	8.2	18.3	24.4	31.0	35.5	42.4	50.3	57.5	67.2	68.0	0.17	8
9	592	0.0	0.68		1.6	9.2	20.6	26.5	35.1	39.8	46.8	54.8	59.0	66.2	67.0	0.17	9
10	598	0.0	0.67		1.7	11.2	22. 6	28.9	38.7	45.2	52.0	56.7	61.0	65.1	66.0	0.17	10
11	604	0.0	0.17		3.6	12.3	24.5	31.0	41.3	48.2	57.2	61.2	64.9	71.1	72.0	0.17	11
12	609	1.0	0.16		4.9	13.9	25.2	31.7	43.2	48.8	56.3	62.5	65.7	72.1	73.0	0.16	12
13	610	2.0	0.49		6.7	13.9	24.5	30.6	40.0	46.1	52.7	57.0	63.9	79.1	80.0	0.16	13
14	618	0.0	0.16		4.6	12.6	23.2	27.5	35.4	41.5	45.6	52.1	56.9	64.1	65.0	0.16	14
15	616	0.0	0.49		4.0	11.9	19.6	24.2	30.4	34.0	39.2	43.9	47.6	52.1	53.0	0.16	15
16	613	1.0	0.16		3.4	10.0	16.9	20.4	24.6	26.9	30.4	37.5	40.8	48.1	49.0	0.16	16
17	609	0.0	0.66		1.4	6.8	13.9	16.B	20.1	22.0	27.1	31.7	34.4	39.5	40.0	0.33	17
18	585	0.0	1.03		0.8	4.4	10.1	12.9	16.2	18.5	24.0	26.2	27.7	34.2	35.0	0.17	18
19	530	0.0	3.58			2.0	6.6	10.0	13.5	15.6	19.1	21.4	25.2	29.2	30.0	0.19	19
20	450	0.0	6.00			0.9	5.7	8.6	11.4	13,4	15.8	19.5	21.8	26.3	27.0	0.22	20
21	374	0.0	5.88			1.0	6.0	8.5	11.6	13.4	16.1	20.4	23,2	27.4	28.0	0.27	21
22	347	0.0	6.05			1.2	5.8	8.5	11.9	13.8	18.8	22.0	26.5	30.5	31.0	0.29	22
23	321	0.0	5. 92			2.0	6.5	8.9	11.9	13.7	18.7	21.8	26.7	30.5	31.0	0.31	23
24	317	0.0	4.10			1.8	7.3	10.3	13.6	16.7	19.8	22.7	26.8	30.5	31.0	0.32	24
25	316	0.0	5.38			2. i	8.7	12.6	16.7	19.7	24.0	27.3	30.4	33.7	34.0	0.63	25
26	314	0.0	4.14			3.4	10.1	15.7	20.5	23,0	27.1	30.9	37.4	40.5	41.0	0.32	26
27	316	0.0	1.90		0.1	5.4	12.6	18.6	23.8	26.1	29.4	34.7	39.8	49.5	50.0	0.32	27

			TAB	LE V-3	DIST	RIBUTIC	N OF W	ESTERL	Y WINDS				WI	ESTERLY	MIND D	ISTRIBU	JTION
STATI	ON:			SANT	MONIC	A, CAL	FORNIA										
REFE	RENCE F	ERIOD:		FEBR	UARY								S.	ANTA MO	MICA, C	ALIFOR	CNIA
STATI	ON ELE	MOITAV	:	125 fe	et or 38	l meter	MSL.							F	EBRUAR	Y	
STATI	ON COOL	DINAT	ES:	34.01	deg N, 1	18.27 de	g W	··· ·									
PERIC	D OF OF	SERVA	TION:	l.ong I	Beach C	alifornia	Janua	ry 1, 19	56-April	17, 1956	· · · · ·				 		
								·	56-Decer	nber 31,	1960		120	OF OBS.	FOR F	ACU I EX	
DATA	SOURCE	:		U.S.	al Weath Weather	Bureau		er					NO.	Or Obs.	568	ACR LE	722
PREP	ARED BY	•		Nation	al Aeron	autics at	nd Space	Adminia	tration			-	_		UNITS:		
				Aerop	hysics ar ary 23,	nd Astro	physics l	Branch,	istles Di Huntsvill	e, Alaba	ma			in	eters/se	cond	
Alt.	No. of	Min.	Pet.				UMULA	TIVE P	RCENT	AGE FEI	EQUENC	Y			Мак	Pet.	Alt
(MSL) km	W'ly Winds	Speed.	Freq	0.135	2, 2A	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99 +65	Speed	l'req.	(MSL) km
síc	301	0.0	35.55				0.8	1.8	3.1	4.0	4.9	6.7	8.4	13.5	14.0	0.33	•fc
1	327	0.0	23, 55				1.0	2.1	4.1	5.8	8.1	10.7	12.5	13.7	14.0	0.61	1
2	405	0.0	8.15			0.8	4.0	6.0	15.4	17.9	21.4	22.0	0.25	2			
3	464	0.0	4.53			2.0	6.9	9.7	19.7	22.3	33.3	34.0	0.22	3			
4 .	493	0. Q	2.64			3.3	9.7	13.2	26.7	30.0	36.6	37.0	0.41	4			
5	514	0.0	1.75		0.1	4.4	12.2	16.1	35.2	38.9	46.3	47.0	0.19	5			
6	524	0.0	2.10		0.0	4.7	14.3	19.2	24.9	28.1	35.4	45.5	49.3	57.2	58.0	0.19	6
7	525	0.0	0.57		0.8	6.3	16.4	22.0	28.3	33.5	43.8	55.0	59.8	67.2	68.D	0.19	7
8	523	0.0	0.76		1.2	7.5	19.6	25.7	33.4	37.7	53.2	59.5	63.7	79.2	80.0	0.19	8
9	528	0.0	0.38		1.7	9.1	22.2	29.4	38.0	44.5	54.8	62.4	65.7	85.2	86.0	0.19	9
10	537	0.0	0.56		2.0	11.8	24.9	32.2	42.3	48.8	59.0	66.3	73.6	84.2	85.0	0.19	10
11	550	0.0	0.55		2.5	13.4	28.2	34.6	47.2	53.5	61.3	68.4	76.5	86.2	87.0	0.18	11
12	564	0.0	0.18		4.7	15.9	29.5	36.2	47.1	53.0	58.8	66.7	75.1	84.2	B5.0	0.18	12
13	568	5.0	0.53		8.8	17.3	28.5	35.1	44.1	48.6	54,3	63.0	69.3	77.2	78.0	0.18	13
14	568	4.0	0.35		8.9	17.2	26.7	31.5	39.0	43,5	49.8	55.5	63.1	68.2	69.0	0.18	14
15	568	3.0	0.18		7.9	15.5	23.0	27.5	33.1	37.0	44.6	49.0	52.3	62.2	63.0	0.18	15
16	567	3.0	0.18		6, 5	13.1	19.2	21.9	27.7	31.4	36, 1	40.5	45.1	50.2	51.0	0.18	16
17	567	2.0	0.18		4.8	9.8	15.3	18.0	23.5	26.8	29.9	32.6	36.3	38.6	39.0	0.35	17
18	566	0.0	0.53		2.3	6.4	11.0	13.8	18.1	20,7	24.0	27.0	29.3	32.2	33.0	0.18	18
19	550	0.0	0.73		0.5	3.1	7.3	9.8	14.7	16.7	19.4	21.9	25. <u>I</u>	29.2	30.0	0.18	19
20	501	0,0	4.79			1.1	4.8	6.9	11.6	15,2	18.5	21.2	24.9	29.3	30.0	0.20	20
21	409	0.0	11.74			0.2	3.3	5.3	10.7	14.4	18.8	21.8	24.4	29.4	30.0	0.24	21
22	314	0.0	15.61			0.0	3.0	5.6	12.0	16.8	20.8	23.7	24.9 25.4	29.5	30.0	0.32	22
23	279	0.0	12.19			0.2	3.1	5.9	14.1	18.3	23.0	23.8	26.3	28.6	29.0	0.36	23
24	239	0.0	7.95			0.6	5.0	8.3	15.9	20,4	24.4	24.6	28.3	28.6	29.0	0.42	25
25	236	0.0	8.05			0.7	5.4	9.9	20.1	23.5	27.1	26.6 29.2	30.7	30.6	31.0 34.0	0.42	26
26	229	0.0	6.99			1.4	6.7	13.6	22.3	28.0	31.2		33.9	1		ł	27
27	219	0.0	5.94			1.2	8.8	15.6	24.5	20.0	31.2	32.6	33.9	36.7	37.0	0.46	41

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

			TAB	LE V-4	DISTE	IBUTIO	N OF WE	STERLY	WINDS	,			WE	STERLY	WIND D	ISTRIBU	MOIT
STATI	ON:			SANTA	MONIC	A, CALI	FORNIA			The second second				NTA MC	NICA, C	ALIFOR	NIA
PEFE	RENCE F	ERIOD:		MARC	н								-37	INTA SIC	MICA, C	ALIFOR	. Nun
STATI	ON ELEV	ATION-		125 fee	it or 3F	l meters	MSI.						L		MARCH		
STATI	ON COOF	DINATE	S:	34.01	deg N. 1	18.27 de	g W										
PERIC	D OF OF	SERVAT	ION:	Long E	Seach C	alifornia Californi	Januar ia April	y 1, 195 18, 195	6-April 6-Deceir	17, 1956 ber 31,	1960						
DATA	SOURCE	1					ds Cente	r			:		NO.	OF OBS.	FOR E	CH LE	VEL
				Ashevi		th Caroli									620		
PREP	ARED BY	1:		Marsh	ali Space	Flight (d Space Center,	\eroballi	stics Div	ision					UNITS:		
					rysics ar try 23, 1		hysics I	ranch,	Iuntavill	a, Alaba	ma			m	eters/se		
Alt. (MSL)	No. of W'ly	Min. Speed.	Pct. Freq.				V'IUMO	TIVE PF	RCENT	GE FRE	QUENCY				Max. Speed	Pct. Freq.	Alt (MSL)
km	Winds	эрееч.	r 10q.	0.135	2.28	15.9	50.0	68.0	64. J	90.0	95.0	97.72	99.0	99 165	10.0	0.30	km
sfc	344	0.0	34.88				1.2	2.6	4.0	4.8	6.1	6.9	7.5	9.5	10.0	0.29	•fc
1	360	0.0	23.61				1.1	2.1	3. 6 8. 2	4.6 9.3	5,8 10,6	7.9 11.7	10.2	20.5	21.0	0.28	1
2	417	0.0	13.19			0.2	3.3	5.5	13.8	17.4	18.0	0.24	2				
3	480	0.0	5.42			1.6	6.1	8.8	20.6	26.3	27.0	0.21	3				
4	531	ú. o	3.95			2.4	8.2	11.8	15.7	17.4	19.8	23.2	25.5	33.2	34.0	0.19	4
5	549	0.0	2.19		0.0	3.4	9.7	13.9	19.0	21.5	24.7	27.6	29.8	38.2	39.0	0.18	5
6	556	0.0	1.26		0.4	5.0	12.5	16.6	21.5	24.3	27.0	30.9	33.6	42.6	43.0	0.36	6
7	563	0.0	1.07		-0.7	5.7	14.4	18.9	23.9	27.3	31.4	34.4	38.1	50.2	51.0	0.18	7
8	575	0.0	1.39		0.6	7.0	16.6	21.4	26.9	30.7	35.3	37.9	42.2	58.2	59.0	0.17	8
9	581	0.0	1.03		1.0	8.9	18.6	23.8	29.7	33.7	40.1	43.6	49.5	54.2	55.0	0.17	9
10	587	.0.0	0.85		2.0	10.7	22. Z	27.6	34.3	39.2	46.8	52.3	56.1	76.2	77.0	0.17	10
11	596	0.0	1.01		1.3	14.0	25.3	31.0	39.1	43.7	55,1	62.4	70.3	80.1	81.0	0.17	111
12	612	0.0	0.65	İ	2.4	15.0	27.3	32.5	39.5	44.9	54.8	62.0	66.9	85.1	86.0	0.16	12
13	620	0.0	0.97		2.1	16.3	26.7	32.3	38.3	42.1	48.4	53.8	58.7	66.1	67.0	0.16	13
14	619	0.0	0.32		3.2	15.0	25.1	29.7	35.7	38,5	43.2	50.1	52.9	58.1	59.0	0.16	14
15	619	0.0	1.13		1.6	14.2	21.7	25.8	31.6	34.6	38,3	42.9	46.8	54.1	55.0	0.16	15
16	619	0.0	0.48		1.3	12.2	18.8	22.4	27.7	29.9	32.7	37.2	40.Z	45.1	46.0	0.16	16
17	612	0.0	0.65		1.9	9.2	14.8	18.2	22.9	25.4	28.3	31.4	32.9	41.1	42.0	0.16	17
18	605	0.0	1.16		1.3	5.9	10.6	13.7	18.2	20.0	22.5	26.4	28.9	38.1	39.0	0.17	18
19	587	0.0	1.02		0.4	2.9	7. Z	9.7	13.5	15.3	17.8	21.8	28.1	34, 2	35.0	0.17	19
20	523	0.0	4.59			1.1	4.9	7.0	9.9	11.9	15.1	21.0	25.7	31.6	32.0	0.38	20
21	441	0.0	9.75	1		0.5	3.5	5.7	8.6	10.1	12.2	17.9	24.Z	29.7	30.0	0.45	21
22	369	0.0	10.03			0.4	3. 3	5.3	7.3	8.9	10,9	14.7	21.3	25.7	26.0	0.54	22
23	334	0.0	9.58			0.5	3, 6	5.4	7.5	8,5	10.7	14.6	21,6	24.5	25.0	0.30	23
24	330	0.0	11.82			0.4	4.1	5.8	7.7	9,0	10.5	14.4	17.7	20.5	21.0	0.30	24
25	336	0.0	8.63			1.1	5.3	7.0	9.1	10.2	11.8	15.1	16.4	17.5	18.0	0.30	25
26	332	0.0	7.23			1.3	6.2	8.7	11.1	12,3	14.2	15.4	16.5	19.5	20.0	0.30	26
27	337	0.0	4.75	1		1.7	6.9	10.5	13.1	14.5	15.9	17.2	18.6	21.5	22.0	0.30	27

			TAB	LE V-5	DIST	RIBUTIO	ON OF W	ESTERL	Y WINDS				w	ESTERLY	WIND	DISTRIB	UTION
STATI	ON:			SANT	A MONIC	A, CAL	IFORNIA						T	4.51m.e			
REFE	RENCE F	ERIOD:		APRII						,				ANTA MO	INICA, (UALIFO	KNÍA
STATI	ON ELE	NOITAN	!	125 fe	et or 3P	l meter	• MSL						L		APRIL		_
STATI	ON COOL	PDINAT	ES:	34. 01	deg N. I	18.27 de	eg W					,					
DERIC	D OF OF	CED I/A	TION.		0b C	-1161	Janua	nu 1 10	4 . Annil	17 1964							
PERIC	or or	SERVA	110N:				ia Apri										
DATA	SOURCE	:			al Weath Weather		rds Cente	er.					NO.	OF OBS.		ACH LE	VEL
OPED	ARED BY	·		Ashev	ille. Nor	th Carol	ina nd Space	Adminis	tration					·	600		
, KEF	MKED III	•		Marsh	all Space	Flight	Center,	Aeroball	istics Di	vision le, Alaba	ma				UNITS eters/se		
Alt.	No, of	Min.	Pet.	Febru	ary 23.		UMULA	TIVE PE	RCENT	AGE FRI	GUENC	Y			Max.	Pet.	Alt
(MSL)	W'ly Winds	Speed.	Freq	0.135	2.28	15.9	50.0	68.0	84. I	90.0	95.0	97.72	99.0	99 165	Speed	Freq.	(MSI
ofc	385	Q. O	25.97				1.6	2.8	4.4	5,2	6.3	7.5	8.7	12.4	13.0	0.26	efc
1	348	0.0	23.56				1.3	2.4	3.8	5.1	6.4	8.6	10.5	16.5	17.0	0.29	1
2	400	0.0	10.00			0.5	3.2	5.0	7.3	8.7	10.6	13.2	14.6	22.4	23.0	0.25	2
3	431	0.0	6.73			1.2	5.2	8.3	11.6	13.3	16.2	18.3	19.7	26.4	27.0	0.23	3
4	470	0.0	3.62			1.9	7.3	26.1	39.3	40.0	0.21	4					
5	504	0.0	4.37			3.0	9.2	13.3	27.9	30,9	44.3	45.0	0.20	5			
6	538	0.0	4.46			2.8	11.0	14.9	21.4	24.1	28.8	34.3	40.6	48.6	49.0	0.37	.6
7	553	0.0	3.44			3.2	12.9	17.5	24.1	27.7	35.0	41.4	47.7	68.2	69.0	0.18	7
8	558	0.0	1.97		0.1	4.7	15.5	20.4	28.0	31.7	38.7	44.1	57, 2	70.6	71.0	0.36	8
9	567	0.0	1.76		0.7	5.6	17. 2	22.8	31.5	36.1	42.2	47.6	54.3	71.2	72.0	0.18	9
10	567	0.0	1.41		0.6	7.5	19.5	26.8	35.0	39.0	42.9	50.5	54.3	64.2	65.0	0, 18	10
11	569	0.0	0.70		1.3	9.3	21.5	28.9	36.9	41.3	46.2	51.0	56,3	68.2	69.0	0.18	11
12	586	0.0	0.68		1.1	10.3	22.6	29.5	36.8	40.2	44.9	50.3	56.0	59.2	60.0	0.17	12
13	598	0.0	0.17		4.4	11.6	22.5	28.1	34.1	37.4 34.5	41.7	47.1	54.0	76.1	77.0	0.17	13
14	599 600	1.0 3.0	0.17	-	5. 6 5. 9	12.2	20.9	25.6 22.7	30, 3	29,1	36.8 31.6	40.3 33.9	44.0 37.6	58.1 45.1	59.0 46.0	0.17	14
16	600	0.0	0.33		4.4	9.6	15.8	19.1	23.0	25.2	27.8	28.9	31.3	43.1	44.0	0.17	15
17	597	0.0	0.17		2.7	7.2	12.5	15.2	18.5	20.2	22.2	23.9	25.8	28.1	29.0	0.17	17
18	593	0.0	0.67		1.0	4.4	8.7	11.2	13.9	15.9	18.1	19.8	22.5	28.1	29.0	0.17	18
19	562	0.0	3. 02			2.1	5.8	7.6	9.9	11.6	13,3	16.6	18.8	23.2	24.0	0.18	19
20	500	0.0	6.60			0.8	3. 9	5.7	7. 5	8.8	11.0	13.3	17.0	22.3	23.0	0.20	20
21	414	0.0	12.32			0.2	2.6	4.2	6.5	7.4	8.8	10.9	12.4	18.4	19.0	0.24	21
22	368	0.0	15.76			0.0	1.8	3.0	5.2	5.9	6.9	8.7	10.1	11.7	12.0	0.54	22
23	304	0.0	15.79			0.0	1.8	3.4	5.3	6, 3	7.7	9.0	10.4	15.5	16.0	0.33	23
24	296	0.0	20. 27				1.6	3.2	5.5	6.8	8.6	10.1	13.5	16.6	17.0	0.34	24
25	305	0.0	17. 38				1.8	4.1	7.2	9.2	10.6	12.3	12.9	19.5	20.0	0. 33	25
26	343	0.0	12.24			0.2	2.6	4.7	7.7	10.7	13.9	16.5	20,5	28.5	29.0	0.29	26
27	386	0.0	9. 33			0.4	3.2	5.8	9.5	11,6	14.9	18.7	22.0	24.4	25.0	0.26	27

			TAB	LE V-6	DIST	RIBUTIÇ	N OF WE	STERLY	WINDS				WE	STERLY	WIND D	ISTRIBU	JTION
STATI	ON:			SANTA	MONIC	À, CAL	IFORNIA	-									
REFE	RENCE F	ERIOD:		MAY									5/	ANTA MO	ONICA, C	CALIFOR	INIA
STAT	ON ELE	ATION:		125 fe	et or 38	1 meter	• MSI.	_					L		MAY		
STATE	ON COO	DINATI	ES:	34.01	deg N, 1	16.27 de	g W										
PERIC	D OF OF	SERVA	TION:	Long I	Seach C	alifornia Californ	Januar ia Apri	y 1, 195	6-April	17, 1956 nber 31,	1960						
DATA	SOURCE	:					rds Cente	r					NO.	OF OBS.	FOR E	ACH LE	VEL
					Weather lle, Nor		ina								620		
TREP	ARED BY	' :		Marsh	all Space	Flight	nd Space Center, / physics I	\eroballi	atics Di	vision e. Alaba	m a				UNITS:		
				Febru	ry 23,	962	CUMULA						٠		еtетв/яе Мах.	Pet.	Alt
Alt. (MSL)	No. of W'ly	Min. Speed.	Pet. Freq.	0.135	2. 2H	15.9	50.0	68.0	84. 1	90.0	95.0	97. 72	99.0	29 165	Speed	Freq	(MSI.
km efc	Winds 422	0.0	21.56	9.13	u. 617	,	2.0	3.3	4.8	5.5	6.6	B. 3	10.7	15.4	16.0	0.24	efc
1	343	0.0	27.41				0.9	1.9	6.3	7.1	7.8	8.0	1.17	,			
2	437	0.0	11.21			0.3	2.8	12.2	13.7	14.0	0.46	2					
3	435	0.0	7.59			0.9	5.1	18.6	20.4	21.0	0.23	3					
4	493	0.0	4.46			2.0	6.5	9.4	21.5	23.0	36.3	37.0	0.20	4			
5	545	0.0	4.40			2.1	7.9	11.0	27.8	31.5	35.2	36.0	0.18	5			
6	563	۵.0	3.02			2.9	9.9	13.0	18.4	21.8	27,4	34.5	38.1	42.2	43.0	0.18	6
7	572	0.0	2.10		0.0	4.2	11.6	15.6	21.2	24.7	31.2	38.9	42.7	48.2	49.0	0.17	7
8	577	0.0	1.73		0.2	4.9	13.7	18.0	24.2	28.4	34.5	41.9	48.0	57.2	58.0	0.17	8
9	589	0.0	1.70		0.2	6.3	15.2	20.3	26.0	30.8	37.8	44.3	48.5	51.6	52.0	0.34	9
10	602	0.0	0.50		1.1	7.7	17.3	22.7	28.7	33.6	40.6	47.8	50.9	57.1	58.0	0.17	10
11	612	0.0	0.49		1.8	8.9	19.6	24.8	31.9	35.2	41.3	48.7	53.9	61.1	62.0	0.16	11
12	615	0.0	0.16		2.7	10.9	21.1	24. 9	32.2	35.9	41.6	48.3	55.8	64.1	65.0	0.16	12
13	620	2.0	0.32		4.2	11.4	19.8	24.5	30.8	34.4	39.7	45.2	50.8	61.1	62.0	0.16	13
14	620	1.0	0.32		4.6	10.5	18.3	22.1	27.4	30.5	34.6	38.6	44.9	49.5	50.0	0.32	14
15	620	2.0	0.65		4.0	9.0	15.2	18.8	23.2	25,5	28.5	32.2	37.9	46.1	47.0	0.16	15
16	618	0.0	0.49		2.5	6.3	11.7	15.0	18.5	20.7	24.0	27.5	30.8	38.1	39.0	0.16	16
17	603	0.0	1.00		0.4	3.5	8.5	11.0	14.1	16.2	18.7	22.0	24.9	30.5	31.0	0.33	17
18	553	0.0	7.59			0.9	4.9	7.1	10.0	11.5	13.5	15.9	19.4	25.6	26.0	0.36	18
19	420	0.0	9.05			0.5	2.9	4.6	6.5	7.6	9.5	11.4	15.4	19.4	20.0	0.24	19 20
20	281	0.0	19.93				1.4	2.5 2.3	4, 1 3. 7	5.2	6.7 5.3	9. I 5. 9	9.8 7.1	10.8	11.0 11.0	0. 71	21
21	183	0.0	19.67				0.8	1.9	2.9	4.5 3.5	4.3	5.2	5.8	6.8	7.0	0.70	22
22	142	0.0	28.17				1.2	2.1	3.6	4.7	5.6	6.3	6.9	7.8	8.0	0.78	23
23	128	0.0	30.25				1.2	2.4	4.4	5.3	7.0	8.7	9.8	15.8	16.0	0.84	24
25	131	0.0	23.66				1.1	2.1	4.4	5.4	6.4	9.5	10.6	11.8	12.0	0.76	25
26	146	0.0	23.97				1.1	2.5	4.9	5.9	7.5	9.8	10.7	11.8	12.0	0.68	26
27	185	0.0	20.54				1.5	2.9	5.2	6.3	8,1	10.7	12,1	13.7	14.0	0.54	27
	1	l ••		I		ı	1	1 - /	} -·-	1	l "	1		1	1		1

	N COOF OF OF OURCE	/ATION: PDINATE SERVAT		JUNE 125 fee 34.01 Long I Santa : Nation U. S. Ashevi	lonica. al Weath Weather	l meters 1F. 27 de alifornia Californ er Reco	s MSL g W i Janua: ia Apri	ry 1, 195 1 18, 195	66-April	17 1856			SA	ANTA MC	ONICA, C	ALIFOR	NIA
STATION STATION PERIOD DATA S	N ELEV N COOF O OF OR OURCE RED BY	/ATION: PDINATE SERVAT		125 fee 34.01 Long T Santa : Nation U. S Ashev Nation	deg N. 1 Beach Colonica. al Weath Weather	1F. 27 de alifornia Californ er Reco	g W Janua: ia Apri	ry 1, 195 1 18, 195	66-April	17 1056							
STATION PERIOD	OURCE	PDINATE		I.ong T Santa : Nation U. S. Ashevi	deg N. 1 Beach Colonica. al Weath Weather	1F. 27 de alifornia Californ er Reco	g W Janua: ia Apri	ry I, 195 I I&, 195	66-April	17 1056					JUNE		
PERIOD	OURCE RED BY	SERVAT		Nation U. S. Ashev	Seach Conica,	alifornia Californ er Reco	Janua ia Apri	ry 1, 195 1 18, 195	6-April	17 1056							
DATA S	OURCE RED BY	1	TION:	Nation U. S. Ashevi	lonica. al Weath Weather	Californ er Reco	ia Apri	ry 1, 195 1 18, 195	6-April	17 1056							
	No. of	1		U. S. Ashevi	Weather		rds Canta		/U-1/61.61.	ther 31.	1960						
PREPAI	No. of W'ly			Ashevi Nation				9 F			****	•	NO.	OF OBS.	FOR EA	CH LEV	ÆL
PREPAI	No. of W'ly			Nation		th Carol							4		600		
	Wily			Marsh	all Space	: Flight (nd Space Center, : physics I	Aeroball i	istics Div	e Alaba					UNITS:		
	Wily			Februa	ary 23,	962							J	in	etqrs/me		
		\lin. Speed.	Pct. Fraq.				A.10170:	T //						T.,	Max Speed	Pct. Freq.	Alt (MSI
-	Winds		24.77	0.135	2,28	15.9	50.0	68.0 2.8	84.1 4.2	90.0 4.8	95 0 5.5	97.72 6.1	99.D	99 ∤65 7.4	8.0	0.23	km sfc
efc	438	0.0	24.66				1.4	1.8	3, 2	4.1	5,2	5.9	8.3	11.5	12.0	0.29	1
1	340	0.0	27.06				0.8 2.8	4.4	10.5	11.5	12.7	13.0	0.46	2			
2	432	0.0	9.11			0.3	4.4	7.0	15.9	19.4	20.0	0.24	3				
3	447	0.0	8.95			0.6	4.9	8.3	14.8	17.9	20.3	21.0	0.22	4			
1		0.0	9.05			0.6	5.6	8.9	18.9	20.3	28.3	29.0	0.22	5			
5	464	0.0	5.31			1.6	6.6	10.0	21.7	24.6	29.3	30.0	0.21	6			
6	497	0.0	5.03			1.8	7.1	10.8	14.2 15.5	16.2 17.7	19.3	24.4	27.0	32.3	33.0	0.20	7
á	503	0.0	2.78			2.9	8.5	12.4	17.6	20.3	23.2	26.2	30.9	39.3	40.0	0.20	8
,	504	0.0	3. 37			4.0	10.6	15.0	19.0	21.4	24.5	27.5	31.6	35.3	36.0	0.20	١,
10	508	0.0	2.17		0.0	5.2	12.9	17.2	22.4	25.0	28.5	31.5	32.9	42.3	43.0	0:20	10
11	515	0.0	0.97		0.6	6.4	15.3	19.6	25.6	27.5	30.3	32.4	38.8	43.6	44.0	0.39	11
12	530	0.0	0.94		1.2	7.7	16.6	21.4	26.3	28,2	30.9	35.9	42, Z	45.2	46.0	0.19	12
13	556	0.0	1.80		0.3	7.2	16.6	20.6	25.6	28,2	31.9	36.4	41.2	54.2	55.0	0.18	13
14	581	0.0	1.20		1.1	6.4	15.0	18.2	22.7	25.2	29.0	32.9	36.0	41.2	42.0	0.17	14
15	583	0.0	1.72		0.3	5.4	11 6	14.4	18.0	20.2	22.6	25.2	28.1	32.2	33.0	0.17	15
16	564	0.0	1.24		0.5	3.5	7.5	9.7	12.3	14.9	17.8	20.8	22,5	27.2	28.0	0.18	16
17	498	0.0	7.83			0.8	3.7	5.5	7.8	8.9	11.0	13.6	17.5	21.3	22.0	0.20	. 17
18	295	0.0	25,42				1.6	2.8	4.8	5.9	7.2	10.6	12,0	16.6	17.0	0.34	18
19	104	0.0	32.69			•	0.6	1.5	3.0	4, 1	4.8	5.5	5.9	6.8	7.0	0.96	19
20	34	0.0	47.06			ĺ	0.1	1.1	1.9	2,8	5.1	5.6	5,8	5.9	6.0	5.88	20
21	11	0.0	27.27				0.8	1.7	4.2	4.8	9.4	9.7	9.8	9.9	10.0	9.09	21
22	10	0.0	30.00			[[. 0. 6	2.8	5.4	6.0	11.5	11.7	11.8	11.9	12.0	10.00	22
23	6	0.0	16.67				1.0	5.0	11.0	11.3	11.6	11.8	11.9	11.9	12.0	16.67	23
24	2	0.0,	100.00												0.0	00.00	24
1				}		l											

NOTE: (1) When the percent frequency of minimum speed exceeded 2.2P and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

				<u> </u>													
			TAB	LE V-8	DIST	RIBUTIO	N OF WI	STERL	Y WINDS				WE	STERLY	WIND D	ISTRIBU	TION
STATI	ON:		,		MONIC	A, CALI	FORNIA	٠					SA	INTA MC	NICA, C	ALIFOR	NIA
	RENCE F			JULY	t or 38	1											
STATE	ON ELE	YATION:		147 180	u di se	1 (11010)	4.31.								JULY		
STATI	ON COO	RDINATI	ES:	34.01	deg N. 1	16. 27 de	g W										
PERIC	D OF OF	SERVA'	TION:	Long F	leach C	alifornia Californ	Janua ia Apri	ry 1, 195 1 18, 195	6-April 6-Decen	17, 1956 ber 31,	1960			;			
DATA	SOURCE	:			al Weath Weather		rde Cente	r					NO.	OF OBS.	FOR EA	CH LEV	ÆĻ
				Aebavi	ile. Nor	th Carol		Adasisla	ion		•				620		
PREP	ARED BY	(:		Marsh	all Space	Flight (nd Space Center, physics I	Aerobali	intica Div Iuntavill	vision e. Alaba	ma				UNITS:		
			T		ry 23, 1	962			RCENTA			·		·m	eters/se	Pct.	Alt
Alt. (MSL)	No. of Wily	Min. Speed.	Pet Freq	0.135	2, 28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.165	Speed	Freq.	(MSL)
km #fc	Winds 478	0.0	22.59	9.179	£, £0	13.7	1.4	2.6	3.8	4.4	4.9	5.5	5.9	B. 3	9.0	0.21	efc .
1	345	0.0	35.65				0.4	1.2	2.4	3.2	3,8	5.0	6.2	7.7	8.0	0.58	1
2	446	0.0	15.25			0.0	2.1	3.0	4.8	5.7	6.9	7.7	8.5	11.3	12.0	0.22	2
3	403	0.0	14. 39			0.1	3.3	4.9	10.7	11.6	13.4	14.0	0.25	3			
4	394	0.0	10.91			0.5	3.6	5.6	8.3	9.6	10.7	12.2	13.3	17.4	18.0	0.25	4
5	396	0.0	12.63			9.4	4.2	6.0	8.9	10.5	11.B	13.Z	14.5	20.4	21.0	0.25	5
6	413	0.0	6.54			0.8	4.7	7.1	10.1	11.5	13.2	16.1	20,8	24.4	25.0	0.24	6
7	424	0.0	7.31			1.4	6.0	9.0	12.2	13.9	15,6	18.7	23.8	27.4	28.0	0.24	7
8	447	0.0	5.82			1.7	6.9	.10.1	13.9	16.4	18.7	21.9	24,7	29.3	30.0	0.22	8
9	478	0.0	2.93			2.1	8.0	12.1	16.4	18,7	20.6	23.5	26.1	29.3	30.0	0.21	9
10	496	0.0	3.02			2.9	8.8	13.2	18.6	21.3	24,2	27.6	29.6	30,7	31.0	0.60	10
11	509	0.0	2.75			3.4	10.2	15.4	20.7	23,3	25.9	29.1	30.9	34.3	35.0	0.20	11
12	572	0.0	3.07			3.6	10.9	16.7	21.'9	24.4	27.3	29.5	32.5	37. Z	38.0	0.19	12
13	527	0.0	3.23			3.1	10.4	16.0	21.4	23.8	27,4	28.9	31.2	34.2	35.0	0.19	13
14	524	0.0	4.39			2.5	8.9	13.1	18.6	21.6	23.6	25.4	26, 7	30.2	31.0	0.19	14
15	490	0.0	6.53			1.4	6.3	9.3	14.0	16.0	17.5	18.8	21.0	26.3	27.0	0.20	15
16	391	0.0	8.70			0.6	3.9	6.5	9.3	10.8	13.8	15.4	16.5	18.4	19.0	0.26	16
17	224	0.0	17.41				2.0	3.7	5.5	7.1 4.2	7.9 4.9	9.9	10.9 8.1	17.6	18.0 9.0	0.45	17 18
18	87	0.0	20.69				1.3	2.1	3.0	1.9	2.7	6.5 7.4	7.7	8.8	8.0	1.15	19
19	25	0.0	14.00 20.00				0.2	0.8	1.6	1.7	1,8	1.9	1.9	1.9	2.0	40.00	20
20 21	5	0.0	20.00				".'			* '	``°	",	,	"'	1		21
21															1		22
22			1														23
24																	24
25				1]									1			25
26															•		26
27	. 2	7.0	50.00					8.3	8.6	8.7	8.8	5.9	8.9	8.9	9.0	50.00	27
	1	l	1	1	1	1	L	1	1	L	<u> </u>	<u> </u>	<u> </u>	L	1	<u> </u>	<u> </u>

			TAB	LE V-9	DIST	RIBUTIO	N OF W	ESTERL	Y WINDS				wı	ESTERLY	WINDD	ISTRIBU	ITION
STATI	ON:	, e		SANT	MONIC	A, CAL	FORNIA				-		T				
PEFE	RENCE F	ERIOD:		AUGU	ST		K	,					- S.	ANTA MO	onica, c	ALIFOR	NIA
STATI	ON ELE	VATION		125 fe	et or 38	i meter	• MSL						L	,	UGUST		
STATI	ON COOL	PDINATI	es:	34.01	deg N. 1	IF. 27 de	g W					············			_		
PERIC	D OF OF	SERVAT	rion:	Long I	Beach C Monica.	alifornia Californ	Janua ia Apri	ry 1, 199 1 18, 199	56-April 56-Decen	17, 1956 nber 31.	1960	3.11-77-7-1-1-1					
DATA	SOURCE	11			al Weath Weather		rde Cent	o r		:			NO.	OF OBS	FOR E	ACH LEV	/EL
				Ashev	lle, Nor	th Carol									620		
ית באיו	ARED BY			Marsh	all Space	Flight	Center,	Adminis Asroball Branch,	tration Istics Di Huntsvill	vision e, Alaba	ıma				UNITS:		
				Febru	ry 23.	962				_			سبك	'''	Max.	Pet.	Alt
Alt. (MSL)	No. of W'ly Wind∎	Min. Speed.	Pct. Freq.	0.135	2.28	15.9	50.0	68.0	84. 1	90.0	95.0	97.72	99.0	99 165	Speed	Freq.	(MSL) km
km efc	475	0.0	22.74		mar		1.3	2.5	3.8	4.4	5.0	5.6	5.9	6.7	7.0	0.63	sfc
1	314	0.0	31.53				0.6	1.4	2.6	3.3	4.1	4.8	5.,7	7.5	8.0	0.32	1
2	425	0.0	18.12	8.3	9.6	11.4	12.0	0.24	2								
3	397	0.0	15.37	9.8	13.0	14.8	15.0	0.76	3								
4	412	0.0	14.08		11.8	12,7	16.4	17.0	0.24	l							
5	412 0.0 14.08 0.1 3.3 5.4 7.8 9.2 10.7 11. 424 0.0 9.67 0.5 3.7 5.7 9.2 10.1 12.1 13.													15.8	16.Q	0.71	5
6	443	0.0	7.90			1.0	4.4	6.7	9.8	11.9	13.5	15.4	16,8	24.4	25.0	0.23	6
7	463	0.0	6.70			1.1	5.2	8.0	11.5	13.0	16.1	17.7	18.8	22.3	23.0	0.22	7
8	482	0.0	6.02			1.5 2.0	7.0	9.6	13.3 15.7	15.1 18.0	16.8 21.0	19.2	25.0	24.3	25. Q 30. 0	0.21	8
9 10	500 514	0.0	4.60 4.28			2.7	8. Z	12.5	17.9	19.9	23.1	26.2	27.6	35.3	36.0	0.19	10
11	527	0.0	2.85			2.8	10.1	14.5	20.0	22.3	25.8	28.9	30.5	36.2	37.0	0.19	11
12	533	0.0	3.56			3.4	10.5	15.4	22.7	25.8	29.4	32.7	34.4	38.2	39.0	0.19	12
13	537	0.0	2.23		0.0	3.5	10.8	15.7	22.3	25.6	29.5	32. i	34.8	38.6	39.0	0.37	13
14	542	0.0	3.14			2.6	9.4	13.2	18.1	20.7	24.3	26.6	28.3	30.2	31.0	0.18	14
15	521	0.0	6.53			1.5	6.8	10.Q	13.6	15.3	17.9	20,5	22,7	24.8	25.0	0.77	15
16	457	0.0	10.94			0.5	3.8	6.1	8.8	10.3	13,3	16.3	19.2	22.3	23.0	0.22	16
17	280	0.0	22.14				1.6	3. Q	5.3	6.7	9.5	12.3	19,2	16.8	17.0	0.71	17
18	109	0.0	35.78				0.6	1.6	3.4	5.5	9.1	10.5	11.9	15.8	16.Q	0.92	18
19	30	0.0	30.00				1.5	2.4	3. 2	5.0	7,5	8.3	8.7	8.9	9.0	3, 33	1
20	12	O. Q	50.00					0.7	1.5	1.8	3.4	3.7	3.8	3.9	4.0	8.33	l
21			100.00		,										0.0	100.00	21 22
22	1.	Q. O	100.00												V. V	100.00	"
								Ì									
		l					L	l				┞┷				أسحب	حبصيبا

NOTE: (1) When the percent frequency of minimum speed exceeded 2.26 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

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	÷ .		TAE	LE V-10	DIST	RIBUTK	ON OF W	ESTERL	Y WINDS	3	٠.	:	w	ESTERLY	WIND) ISTRIB	JTION
STAT	ION:			SANT	A MONIC	A, CAL	IFORNIA		·		-		-				
REFE	RENCE I	ERIOD:		SEPT	EMBER								S.	ANTA MO	ONICA, O	CALIFOR	RNIA
STAT	ON ELE	VATION		125 fe	et or 38	1 meter	• MSL							SEF	TEMBE	R	
STAT	ON COO	PDINAT	ES:	34.01	deg N. I	18.27 de	eg W		• 11			•			100		
PERÍC	D OF O	SERVA	TION:				Janua da Apri										<u></u>
DATA	SOURCE	:		U. S.	Weather	Bureau	rds Cent	0 F		٠.			NO.	OF OBS	FOR E	ACH LE	VEL
PREP	ARED BY	7,		Nation		autics a	nd Space								UNITS		
			•	Aerop	hysics at	nd Astro	Center, physics 1	Auroball Branch,	ietice Di Huntavi):	ivision le, Alabe	ma			·	etere/ee		
Alt.	No. of	Min.	Pet.	rapru	ry 23,		CUMULA	TIVE PI	ERCENT.	AGE FRI	COUENC	Y			Max.	Pct.	Alt
(MSL)	W'ly Winds	Speed.	Freq.	0.135	2.26	15.9	50.0	68.0	R4. J	90.0	95.0	97.72	99.0	99 865	Speed	Freq	(MSI
afc	384	0.0	30.47				1.2	2.6	3.7	4.2	4,8	5.6	6,4	7.4	8.0	0.26	efc
1	321	0.0	30.22				0.8	1.6	2.7	3, 3	4.0	4.8	5.9	6.8	7.0	0.93	1
2	378	0.0	15.34			0.0	2.3	3.6	5.5	6.4	7.3	8.7	9.8	14.4	15.0	0.26	2
3	375	0.0	12.00		·	0.4	3.3	5.1	7.6	8,8	10.5	11.9	13.6	15.4	16.0	0.27	3
4	407	0.0	10.81			0.4	3.6	5.8	9,1	10.7	13.1	16.2	17.7	23.4	24. Q	0.25	4
5	431	0.0	8. 35			0. B	5.0	6.9	16.1	11.8	14.6	ì7.5	20.3	26.4	27.6	0.23	5
6	456	0.0	6.14			1.7	6.1	8.6	11.9	14.3	17.2	21.1	24.7	32.3	33.0	0. Z2	6
7	474	0.0	3.59			2. 2	7.9	10.7.	14.2	17.2	21.2	23.1	33.6	34.3	35.6	0.21	7
8	493	0.6	3.45			3. 1	9.6	12.8	17.1	20.7	25.5	31.7	35,6	45.3	46.6	0.20	
9	503	0.0	1.59		0.2	4.2	10.9	15.1	21.1	24.7	28.7	32.8	36.9	43,3	44.0	0.20	9
10	517	0.0	<u>1</u> .56		0.5	48	13.5	18.3	25.0	27.9	31.6	36.3	39.9	48.3	49.0	0.20	10
11	535	`0.0	2.24		0.0	5.5	15.5	19.8	28.6	31.5	35.3	37.9	42.8	57.2	58.0	0.19	11
12	551	0.0	0.73		0.8	6.7	18.2	22.2	30.4	33.8	36.3	39.3	41.6	46.2	47.0	0.18	12
13	569	0.0	1.23		0.9	6.8	18.7	23.0-	29.0	31.7	35,6	39.6	41.8	48.2	49.0	0.18	13
14 15	572 566	0.0	0.17		0.8	7.1	16.5 12.8	20.6	24.9	27.7	31,4 24,6	34.6	39.2 30.1	44.2	45.0	0.17	14
16	561	0.0	0.35 3.21		U. B.	5.3 2.9	8.3	16.2	14.8	16.5	10.4	27.5 22.4	24.3	36.6 28.2	37.0 29.0	0.35	15
17	486	0.0	6.79			1.1	4.6	6.8	9.6	11.3	13.7	16.7	19.3	21.3	22.0	0.15	. 17
18	360	0.0	18.89				2.3	3.8	6.0	7.5	10.0	10.9	13.4	18.7	19.0	0.56	18
19	219	0.0	19.63				1,5	2.8	4.3	5.4	6.7	8.2	8.7	14.7	15.0	0.46	19
20	116	0/0	30. 17				1.2	1.9	3.0	3,8	5.0	5.8	6.8	11.8	12.0	0.86	20
21	64	0.0	25.00				0.7	1.5	2.4	2.8	4,4	5.2	5.6	5.9	6.0	3.13	21
22	44	0.0	40.91				0.3	0.9	2.2	2,6	2.9	3.9	5.5	5.9	6.0	2.27	22
23	35	0.0	28.57				1.0	1.6	2.3	2.8	4.6	5.2	5.6	5.9	6.0	2.86	23
24	28	0.0	21.43			•	1.6	2.5	4.2	6.1	8.6	9.3	9.7	9.9	10.0	3.57	24
25	28	0.0	17.86			'	1.6	3.0	4.5	5.0	5,8	8.3	8.7	8.9	9.0	3.57	25
26	28	0.0	17.86				1.6	4.0	5.3	5, 7	6, 6	10.3	10,7	10.9	11.0	3.57	26
27	42	0.0	16.67		•		Z. 1	3.3	6.0	6,5	6.9	10.0	10.5	10.9	11.0	2. 38	27

			TAE	LE V-11	DIST	RIBUTIO	ON OF W	ESTERL	Y WINDS				WE	ESTERLY	WIND I	ISTRIB	UTION
STAT	ON:			SANT	A MONIC	CA, CAL	IFORNIA		······································				╁	-	*	·	
REFE	RENCE I	PERIOD:		осто	BER								54	ANTA M	ONICA, 6	CALIFO	RNIA
STAT	ON ELE	VATION		125 fe	et or 3F	l meter	• MSL								остове	R	
	511 555												_1_				
STATE	ON COO	KDİNAT	r.s:	34.01	deg N,	l16.27 d	eg w										
PERIC	D OF O	SER VA	TION:	Long l	Beach (Monica,	California Californ	a Janua da Apri	ry 1, 19 1 18, 19	56-April 56-Dece	17, 1956 nber 31,	6 1960						
DATA	SOURCE	:			al Weath		rds Cent	e r					NO,	OF OBS	FOR E	ACH LE	VEL
DDED	ARED BY	· · · · · · · · · · · · · · · · · · ·		Ashev	ille. No:	th Caro	ina nd Space	Admini	tration						620		
CKEF	ARED DI			Marsh Aerop	ali Spaci hysics a:	e Flight nd Astro	Center,	Aeroball	latica Di Huntavii	vision le, Alaba	ıma				UNITS eters/se		
Alt.	No. of	Min.	Pet	Febru	ry 23.		CHMULA	TIVE P	ERCENT	AGE ERI	EQUENC	v			Max.	Pet.	Λlι
(MSL) kin	W'ly Winds	Speed.	Freq	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSL)
afc	348	0.0	29.89				1.2	2.4	3.6	4.0	4.7	5.4	5.9	9.5	10.0	0.29	•fc
1	290	0.0	37.24				0.4	1.0	2.1	2.9	3.7	4.8	6, 1	10.6	11.0	0.34	,
2	278	0.0	15.11			0.0	1.9	3.6	5.4	6.3	7.6	8.8	10.1	13.6	14.0	0.36	2
3	298	0.0	9.73			0.6	3.9	6.0	8.7	11.1	12.6	15.4	17.0	23.5	24.0	0.34	3
4	378	0.0	7.94			0.9	4.7	7.6	11.5	14.0	17.5	19.5	22,2	27.4	28.0	0.26	4
5	431	0.0	6.26			1.3	6.2	8.7	13.2	15.7	21.1	24.3	27.6	45.4	46.0	0.23	5
6	458	0. Q	5.68			1.6	6.5	9.8	15.0	18.3	24.0	27.5	33,4	47.3	48.0	0.22	6
7	476	0.0	4.20			2.0	7.9	11.0.	16.2	20, 1	26.0	29.8	38, 2	51.3	52.0	0.21	7
8	482	0.0	2,70		!	3.1	9.3	13.3	16.2	22.4	27.9	34.0	38, 1	63.3	64.0	0.21	В
9	503	0.Q	2,79			3.8	11.0	14.7	20.5	25.1	29,5	34.2	38.9	59.3	60.0	0.20	9
10	507	0.0	1.97		0.1	5.73	12.9	16.8	21.7	26.0	32,3	34, 7	42.9	47.3	48.0	0.20	10
11	520	0.0	2.12		0.0	6.4	14.3	18.8	23.9	26.2	31.6	37.7	38.9	44.6	45.0	0.38	11
12	536	0.0	0.93		0.8	7.2	15.2	19.4	24, 2	27,2	31.5	34.3	39. 1	41.2	42.0	0.19	12
13	561	0.0	0.89		1.2	6.5	15.2	19.4	23.8	26.2	29.4	33.0	34.8	38.2	39.0	0.18	13
14	573	0.0	0.70		1.1	6.3	14.7	18.3	22.0	24.6	27.2	29.3	33.0	38.2	39.0	0.17	14
15	578	0.0	0.69		0.9	5.9	12.6	16.0	19.6	21.5	24.2	26.5	28.4	31.2	32.0	0. 17	15
16	580	0.0	1.21		0.7	4.5	10.1	13.2	16.4	18.2	20.4	23.6	27.0	29.2	30.0	0.17	16
17	573	0.0	3.66			2.2	7.4	9.7	12.8	14.2	16.5	18.9	22,0	30.2	31.0	0.17	17
18	528	0.0	4.17			1.4	4.9	6.8	9.0	10.5	12.7	14.7	16.5	22.2	23.0	0.19	18
19	479	0.0	9.81			0.5	3.0	4.3	6.5	7.8	9.4	12.2	15.0	15.6	16.0	1.04	19
20	418	0.0	17.94				2.0	3.4	5.3	6.6	8,1	10.1	11.4		17.0	0.24	20
21	372	0.0	19.89				1.5	2.7	4.9	5.8	7.0	8.5		11.7	12.0	0.54	21
22	350	0.0	18.00				1.9	3.0	4.7	5.6	6.6	8.2	9, 1	9.8	10.0	1.14	22
23	371	0.0	14.02			0.0	1.9	3.2	5.0	6.1	7,7	8.9	9.5	9.9	10.0	2.16	23
24	367	0.0	10.35			0.3	2.8	4.4	6.2	7,3	9.4	11.3	13.3	18.5	19.0	0.27	24
25	397	0.0	12.34			0.2	2.9	5.0	7.2	8.6	10.6	12.4		17.4	18.0	0.25	25
26	417	0.0	7.91			0.7	3.9	6.0	9.0	10.6	13.0	14:6	16.4	18.4	19.0	0.24	26
27	- 444	0.0	7.21			0.9	5.1	7.6	10.8	12.8	15,6	18.9	19.9	24.4	25.0	0.23	27

			TAB	LE V-12	DIST	RIBUTIC	ON OF WI	ESTERL	Y WINDS	:	•		WI	ESTERLY	MIND D	ISTRIBU	ITION
STATI	ON:			SANT	MONIC	A, CAL	IFORNIA										
REFE	RENCE F	ERIOD:		NOVE	MBER					· · · · · · · · · · · · · · · · · · ·			5.	ANTA MO	ONJCA, C	ALIFOR	NIA
STATI	ON ELE	VATION:		125 fe	et or 38	l meter	• MSL						L	N	OVEMBE	R	
STATE	ON COOL	RDINATI	CS:	34.01	deg N, 1	18.27 de	g W										
PERIO	D OF OF	SERVA	ION:				Janua ia Apri										
DATA	SOURCE			U. S.	Weather	Bureau	rda Cento	•r	i	,			NO.	OF OBS.		CH LEV	EL
PREP	ARED BY	<u> </u>		Nation Marsh Aeropi	all Space hysics as	autics a Flight nd Astro	ina nd Space Center, physics I	Aeroball	stics Di	vision le, Alaba	mā			ın	UNITS:		
Alt.	No. of	Min.	Pct.	rebru	ry 23,	_	CUMULA	TIVE PE	RCENT	AGE FRE	QUENC	Υ			\4-x.	Pct.	Alt.
(MSL) km	W'ly Winds	Speed.	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99. D	99 165	Speed	Freq.	(MSL) km
síc	252	0.0	31.75				1.1	2.1	3.2	3.9	4.6	5.5	6,4	14.6	15.0	0.40	síc
1	289	0.0	31.83				0.6	1.4	2.4	3, 1	4,7	7.7	10,1	15.6	16.0	0. 35	1
2	293	0.0	20.48				1.7	3.2	5.0	6.4	8.6	11.4	14.0	20.6	21.0	0.34	2
3	351	0.0	10.83			0.4	3.7	5.7	8.9	10,3	13.2	16.2	17.4	21.5	22.0	0.28	3
4	391	0.0	8.18			0.9	5.3	8.4	11.8	14,1	17.4	20.5	23.3	29.4	30.0	0.26	4
5	410	0.0	5.12			1.4	7.1	10.3	14.6	17.0	21,5	25.3	29.9	42.4	43.0	0.24	5
6	440	0.0	5.00			2.2	8.4	12.3	17.1	20,1	27.0	30.4	33,6	51.4	52.0	0.23	6
7	469	0.0	3.84			2.5	9.8	14.1	20.3	24.0	28.9	36.1	42.3	45.6	46.0	0.43	7
8	484	0.0	3, 10			3.1 -	11.7	15.6	23.5	28.2	33,1	37.9	41,7	52.3	53.0	0.21	8
9	492	0.0	2.24		0.0	3.9	13.1	18.3	25.5	30.3	36,8	39.9	44,0	49.3	50.0	0.20	9
10	501	0.0	1.80		0. Z	4.6	14.9	21.1	29.8	33.7	38,6	41.9	45,3	52.3	53.0	0.20	10
11	527	0.0	1.71		0.3	5.1	16.3	22.5	31.1	34.4	40.3	43.9	53.1	60. Z	61.0	0.19	11
12	544	0.0	1.47		0.3	5.5	16.1	23.3	30.6	33.8	38.9	44.5	52.5	64.2	65.0	0.18	12
13	555	0.0	1.26		0.5	5.8	16.2	22.3	28.8	31.8	36.2	40.3	43,4	54.2	55.0	0.18	13
14	545	0.0	0.73		0.9	6.0	15.5	21.3	28.4	31.1	34.3	36.6	37. 9	54.2	55.0	0.18	14
15	549	0.0	0.91		0.6	5.4	14.7	18.9	23.9	27.1	29.9	31.8	35.5	43.2	44.0	0.18	15
16	545	0.0	1.28		0.4	4.8	12.9	16.6	20.6	22,4	24,5	27.4	28,8	36.2	37.0	0.18	16
17	533	σ. ο	2.06		0.0	3.7	10.2	13.6	17.1	18.7	20.8	23.2	24.8	29.2	30.0	0.19	17
18	512	0.0	3, 52			2.4	7.7	10.0	14.3	16.0	18,3	20.6	22.6	27.6	28.0	0.39	18
19	474	0.0	5.91			1.5	6.0	8.3	11.4	13.3	15.5	18.3	21,1	25.3	26.0	0.21	19
20	430	0.0	7.44			1.2	5.1	7.2	10.2	11.6	14.2	16.7	18.2	22.4	23.0	0.23	20
21	421	0.0	9.98			0.5	4.6	7.0	9.6	11.2	13.3	15.2	15.9	18.4	19.0	0.24	21
22	407	0.0	8.85			0.7	4.8	6.8	9.6	10.8	13.5	15.3	16.3	18.4	19.0	0.25	22
23	402	0.0	6.72			1,0	5.4	7.9	10.5	12.6	14.9	18.4	20,6	22.7	23.0	0.50	23
24	410	0.0	6.83			1.4	5.9	8.6	11.9	14.6	17.7	19.7	22.9	25.7	26.0	0.49	24
25	424	0.0	5.90			1.7	7.0	10.1	14.2	16.7	19.2	22.2	24.7	32.4	33.0	0.24	25
26	444	0.0	4.28			2.1	8.6	11.9	16.0	19.1	22, 1	25.3	27.5	32.7	33.0	0.45	26
27	446	0.0	2.69			3.3	10.3	14.5	19.1	22,0	25.6	28.2	30.8	34.3	35.0	0.22	27
<u> </u>	L							<u> </u>		35 cursul	<u> </u>			لــــــــــــــــــــــــــــــــــــــ			L

			TAB	LE V-13	DIST	RIBUTIÇ	ON OF W	ETTERL	Y WINDS	;			WE	ESTERLY	WIND D	oistribi	J TI ON
STATI	ON:			SANT	A MONI	CA, CAL	IFORNIA						1				
REFE	RENCE	PERIOD:		DECE	MBER				·				-5/	ANTA M	ONICA, C	CALIFO	₹NI∧
STATI	ON ELE	VATION:		125 fe	et or 3P	1 meter	s \f\$1.	-	•					DE	семве	R	
STATI	ON COO	TOINATI	ES:	34.01	deg N.	118.27 de	eg W										
PERIO	D OF OF	SERVA"	rion:				Janus da Apri									-	
DATA	SOURCE	:					rda Cente	e r					NO.	OF OBS	. FOR E.	ACH LE	VEL
					Weather ille, No:	Nureau	lina								620		
ליום חיו	ARED BY	·:	•	Marsh	all Space	e Flight	nd inace Center.	Aeroball	istics Di	vision					UNITS	•	
					hysics a ary 23,		physics I	Tranch,	Huntas il	le, Alaba	ıma			m	eters/se	cond	
Alt. (MSL)	No. of W'ly	Min. Speed.	Pet. Freq.		<u></u>	Γ	DUNULA				F				\!ax. Speed	Pct. Freq.	Alt (MSI
kın	Winds			0.135	2, 2H	15.9	50.0	66.0	F4.1	90.0	95.0	97.72	99.0	99.165			km
efc .	234	0.0	29.49				0.9	1.6	2.4	2.8	3.8	4.9	5.8	7.6	8.0	0.43	∌fc ,
1	244	0.0	32.38				0.7 2.0	1.6	3.0 6.8	8.1	9.4	10.9	8,8 15.0	16.6	11.0	0.41	2
2	282	0.0	17.73			0,2	3.4	5.4	9.4	11.1	13.6	16.9	21,4	23.5	24.0	0.35	3
3	353 401	0.0	12.46 7.23			1.0	5.1	7.7	12.1	14.5	18.3	21.8	26.9	45.4	46.0	0.25	,
5	439	0.0	4.56			1.8	6.7	9.7	14.3	17.4	21.6	25.4	30.8	46.4	47.0	0.23	5
6	459	0.0	4.58			2.0	8.2	11.4	16.5	20.6	26.0	29.7	35.4	55.3	56.0	0.22	6
7	470	0.0	3.83			2.8	10.0	13.8	19.1	23.2	29.3	33.4	37.3	51.3	52.0	0.21	7
8	469	0.0	2. 35			3.5	11.6	16.1	22.9	26.0	31.8	39.1	41.7	54.6	55.0	0.43	8
9	484	0.0	1.24		0.4	4.2	13.0	18.0	27.0	30.5	36.2	43.9	53.1	60.3	61.0	0.21	9
10	502	0.0	1.79		0.2	5.0	14.8	20.6	29.8	34.3	38.7	46.7	59.9	74.3	75.0	0.20	10
11	513	0.0	1.36		0.4	6.5	17.6	24.8	33.2	37.4	44.5	51.3	64.8	71.6	72.0	0.39	11
12	540	0.0	0.37		1.1	7.9	18.6	24.6	33.1	38.0	44.7	54.6	57.8	75.2	76.0	0.19	12
13	575	0.0	1.74		0.2	7.6	17.3	23.4	30.7	35.0	42.1	47.8	53.0	61.2	62.0	0.17	13
14	592	0.0	1.69		0. Z	6.7	16.9	21.6	27.9	31,3	35.2	38.1	42.6	49.2	50.0	0.17	14
15	590	0.0	0.68		1.0	6.3	15.4	19.8	24.4	26.8	31.0	33.7	36.5	41.6	42.0	0.34	15
16	591	0.0	2.88			5.1	13.1	17.0	21.0	24,2	27.3	29.7	32.0	35.2	36.0	0.17	16
17	569	0.0	2.46			4.0	10.5	13.7	17.5	19.6	22.3	27.0	29.1	31.2	32.0	0.18	. 17
18	539	0.0	3.71			2.6	8.0	10.7	14.1	16.1	19.7	22.9	26.5	28.7	29.0	0.56	18
19	493	0.0	6.09			1.0	5.7	8.1	11.0	12.8	16.7	19.2	20.6	26. 3	27.0	0.20	19
20	417	0.0	10.55			0.4	3.7	6. 1	9.1	10.8	13.0	14. 6	16.9	20.4	21.0	0.24	20
21	356	0.0	12.08			0, 2	2, 9	5.3	8.4	10.2	12.2	14.9	16.4	18.5	19.0	ō. 28	21
. 22	308	0.0	16.88				2.7	4.8	8.0	10.1	11.7	13.9	16.4	19.5	20.0	0.32	22
23	294	0.0	9.86			0.3	. 3.1	4.9	7.5	9.3	11,9	16.1	20.0	23.6	24.0	0.34	23
24	306	0.0	11.76			0.3	3.1	5.2	7.7	10.1	13,4	17.0	19.4	25.5	26.0	0.33	24
25	334	0 .0	9.58			0.4	3.5	5.8	8.9	10.6	13.4	16.1	19.3	28.5	29.0	0.30	25
26	358	0.0	7.26			1.1	5.2	7. B	11.2	13.0	15,6	19.4	21.6	29.5	30.0	0.28	26
27	380	0.0	5.79			1.5	6.3	9.7	13.5	15.6	18,4	22.1	25.4	29.4	30.0	0.26	27

Page

TABLE VI

Distribution of Northerly Winds

(Component from the north semiplane)

Unit: meters per second

Table VI-1 Annual 86
Table VI-2 January 87
Table VI-3 February 88
Table VI-4 March 89
Table VI-5 April 90
Table VI-6
Table VI-7 June 92
Table VI-8 July 93
Table VI-9 August 94
Table VI-10 September
Table VI-11
Table VI-12 November
Table VI-13 December 98

			TABI	E VI-1	DIST	RIBUTIO	N OF NO	RTHERL	Y WIND	5			ион	THERL!	Y WIND I	ISTRIB	NOITU
STATI	ON:						FORNIA						十				
	RENCE F	ERIOD:		ANNU									5/	ANTA MO	ONICA, C	ALIFOR	NIA
	ON ELE					l meter	MSL								ANNUAL		
			·													-	
STATI	ON COO!	RDINATE	:S:			18.27 de											
PERIC	D OF O	SERVAT	ION: ,	Long E Santa S	Seach C Monica,	alifornia Californ	Januar ia April	y 1, 195 l 18, 195	6-April 6-Deceir	17, 1956 ber 31,	1960						
DATA	SOURCE	l:			al Weath Weather		rde Cente	r					NO.	OF OBS.		CH LEV	EL
				Ashevi	lle, Nor	th Carol	ina nd Space	Adminis	tration						7308 UNITS:		
TREP	ARED BY	(:		Marsh	all Space	s Flight nd Astro:	Center. /	\eroballi	stice Div	vision e, Alaba	ma			m	aters/se		
	T.: .			Febru	ry 23,	1962	OMULA'					7			Max.	Pet.	Alt.
Alt. (MSL)	No. of N'ly	Min. Speed.	Pct. Freq.	0.135	2, 2H	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99 865	Speed	Freq	(MSL) km
km efc	Winds 2829	0.0	39. 91	9.175		17.7	0.3	1.0	1.9	2,7	3.9	5.9	7.7	12.3	15.0	0.07.	əfc
1	3645	0.0	31,93				0.7	1.8	4.0	5.4	7,3	9.4	12.0	16.0	22.0	0.03	1
2	3698	0.0	18.58				1.9	3.5	5.8	7,4	9.6	12.2	14.8	22.0	27.0	0.03	2
3	3643	0.0	12.38	i		0.2	3.4	5.5	8.6	10.7	13.7	16.7	19.9	27.0	38.0	0.03	3
4	3639	0.0	10,47			0.5	4. Z	7.0	10.7.	12.8	16.6	20. Z	23.1	32.5	47.0	0.03	4
5	3533	0.0	9.14			0.7	5.0	8.4	12.8	15.4	19.7	23.7	26.8	42.2	56.0	0.03	5
6	3519	0.0	7.67			0.9	5.7	9.6	14.7	18.2	22,5	26.6	32.3	56.2	64.0	0.03	6
7	3483	0.0	7,44			1.1	6.6	10.6	16.6	20.6	25.9	30.9	38.0	53,7	76.0	0.03	7
	3421	0.0	6.20			1.4	7.5	12.0	19.2	23.7	29.4	36.3	41.8	58.6	79.0	0.03	8
8	3374	0.0	6. 14			1.6	8.2	13.4	21.4	26.4	32.9	40.0	46.B	63.4	73.0	0.03	9
9	3308	0.0	5.17			1.7	9.0	14.7	23.6	28.4	35.5	40.8	46.8	56.5	63.0	0.03	10
10	3282	0.0	4.94			1.8	9.3	15.2	23.7	28.3	35.2	41.6	46.9	56.5	68.0	0.03	11
11		0.0	4, 67			1.8	8.6	13.6	21.8	26.2	32.5	38.4	43.8	54.7	63.0	0.03	12
12	3146	0.0	5.58			1.5	7.2	11.5	18.1	22.6	29,3	35.8	40.7	47.9	63.0	0.03	13
13	3026	0.0	6.29			1.2	6.0	9.4	15.5	19.5	25.1	30.4	35.8	44.0	46.0	0.07	14
14	2927 2884	0.0	8.04			0.8	5.0	8.2	12.9	15.7	19.7	24.6	28. Z	34.7	39.0	0.03	15
15	2984	0.0	10.02			0.5	3.8	6.6	10.5	131	16.3	20. Z	24.2	29.4	32.0	0.07	16
16	3194	0.0	11.37			0.3	2.8	4.9	7.9	10.2	12.8	15.8	18.3	23.5	26.0	0.03	. 17
17	3451	0.0	15.94			"	2,2	- 3.9	6.5	8.0	10.5	13.0	15.2	18.6	23.0	0.03	18
18	i	0.0	18.57				1.7	3,2	5.3	6.6	8.4	10.5	12.3	15.6	19.0	0.03	19
19	3774	0.0	20.97				1.4	2.6	4.4	5.4	6.8	8.6	10.3	14.9	21.0	0.03	20
20	3978		23.09	1			1.1	2.2	3.9	5.0	6.4	8.2	9.7	13.2	21.0	0.02	21
21	4063	0.0	23.26	1			1.1	2.2	3.8	4.9	6.3	7.9	9.8	13.8	20.0	0.02	22
22	4178		23.26				1.1	2.1	3.7	4.8	6.2	7.8	9.4	12.6	15.0	0.05	23
23	4190		23.46	1			1.0	2.1	3.9	4.9	6.3	8.0	9.7	14.6	16.0	0.12	24
24	4228	1	1]			1.2	2.3	4.0	5,2	6.7	8.6	10.2	14.7	20. d	0.02	25
25	4107	1	21.11	l			1.4	2.6	4.4	5.6	7.6	9.3	11.0	16.6	24.0	0.02	26
26	4153	1	19.34	ł] .	ļ	4.8	6.1	7.9	9.9	12.5	20.7	27.0	0.02	1
27	4123	0.0	16.91	1			1.5	2.8	1.0	6.1		1 7.7	16.5	1	L		

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

	-		TAB	LE VI-2	DIST	RIBUTIO	ON OF NO	ORTHER	LY WINI	os:			ЮИ	THERL	r wind i	DISTRIB	UTION
STATI	ON:			SANTA	MONIC	A, CALI	FORNIA		****		-			ANTA MO	MICA C	AL IEO	D NTT &
REFE	RENCE F	ERIOD:		JANU										ANIA MO	MICA, C	ALIFOR	CNIX
STATI	ON ELE	ATION:	÷	125 fe	et or 3F	l meter	MSL						L	-	JANUAR	Y	
STATI	ON COOL	TANIO	S:	34.01	deg N. l	15 . 27 de	g W	-									
PERIO	D OF OF	SERVA	rion:	Long I Santa	Beach C Monica	alifornia Californ	Janua: ia Apri	ry 1, 195 1 18, 195	6-April 6-Decen	17, 1956 nber 31,	1960						
DATA	SOURCE	:					rds Cente	o r				-	NO.	OF OBS.	FOR E	CH LEV	VEL
				Ashev	Weather ille, Nor	th Carol		·							620		
TREP	ARED BY	t:		March	all Space	Flight	nd Space Center, a physics I	Aeroballi	istics Di	vision	ma.				UNITS		
					ary 23, I	962							. 	m	elers/se	_	1 414
Alt. (MSL)	No. of N'ly	Min. Speed.	Pct. Freq.				COMOLA				95.0	97.72	99.0	99.865	Max. Speed	Pet. Freq	Alt. (MSL)
km efc	Winds 380	0.0	35.26	0.135	2.28	15.9	50.0 0.5	68.0	84.1	90.0 3.2	95.0 5.0	7.2	8.0	9.4	10.0	0.26	efc.
) I	312	0.0	33.33			. 	0.8	2.4	4.4	5.7	7.6	10.4	12.4	15.5	16.0	0.32	1
z	334	0.0	9.88			0.5	2,9	4.7	7.7	8.9	10.7	12.3	14,3	18.5	19.0	0.30	2
3	348	0.0	6.61			1.4	5.7	8.4	11.3	12,9	15.2	18.0	20,7	30.5	31.0	0. 29	3
	347	0.0	4.90			1.9	7.6	10.6	13.6	16.4	19.3	21.7	24.7	32.5	33.0	0. 29	4
5	344	0.0	4.65			2.6	8.3	12.4	16.8	20, 1	24.2	26.2	29.5	38.5	39.0	0. 29	5
6	345	0.0	3.77			2.4	9.4	13.9	19.3	22,7	25,6	30.5	37.2	43.5	44.0	0.29	6
7	328	0.0	4.27	ł		2.5	10.5	15.6	23.3	27.3	31,8	36.2	39.9	53.5	54.0	0.30	7
8	315	0.0	3.49			3.7	12.4	18.2	26.6	31.6	35.8	38.6	41.8	49.5	50.0	0.32	8
9	305	0.0	2.30	}		4.5	14.5	22.4	31.1	34,2	38,7	44.0	47.4	64.5	65.0	0./33	9
10	296	0.0	1.69		0.5	4.4	16.2	24.5	33.9	37,8	40.0	45.2	51.0	54.8	55.0	0.68	10
11	309	0.0	1.29		0.3	3.8	15.1	23.7	32.7	38.5	43.5	46.9	50.9	67.5	68.0	0.32	11
12	313	0.0	1.26	1	0.3	3.2	11.5	21.9	31.1	36,8	42.4	48.6	50.9	57.5	58.0	0.32	12
13	314	0.0	3.18			2.8	10.8	16.5	26.7	32.1	39.4	42.4	44.8	50.5	51.0	0.32	13
14	315	0.0	5.71			1.7	7.8	14.4	22.7	26.9	31,1	39.4	41.9	44.5	45.0	0. 32	14
15	315	0.0	4.13]		1.6	6.5	11.5	19.4	22.9	28.3	30.8	33.9	34.8	35.0	0.95	15
16	321	0.0	4.,36			1.2	5.5	8.4	15.1	17.7	23.9	25.8	29.3	31.5	32.0	0. 31	16
17	340	0.0	4.41			1.1	4.2	6.5	11.5	13.7	17.0	21.1	23.3	25.5	26.0	0.29	17
18	369	0.0	8.40			0.7	4.0	5.9	9.4	11.7	14.5	17.2	18.5	21.5	22.0	0.27	18
19	413	0.0	8.72			0.5	3.0	5.0	7.8	9.4	11.7	13.3	14,6	17.4	18.0	0.24	19
20	438	0.0	10.50	1		0.3	2,5	3.9	6.0	7.1	9.6	11.4	13,6	16.4	17.0	0.23	20
21	447	0.0	12.53			0.2	2.5	4.2	6. 3	7.6	8.7	10.5	11,3	12.6	13.0	0.45	21
22	454	0.0	9.91			0.3	2.6	4.4	6.4	7.7	9.9	11.1	12.4	16.3	17.0	0.22	22
23	464	0.0	8.19			0.6	2.7	4.3	6.4	7.8	9.3	10.8	12.3	14.3	15.0 16.0	1.07	23
24	467	0.0	10.06			0.3	2.7	4.5	6.3	7.5	9.5	11.7	15.5	19.3	20.0	0. 22	25
25	445	0.0	9.66			0.5	3.0	4. 6 5. 2	6.8	8.4	9.9	14.6	19,6	25.4	24.0	0.23	26
26 27	436	0.0	9,17			0.6	3.5	5.6	7.9	9.5	12,6	17.1	21.6	26.4	27.0	0. 23	27
27	433	0.0	7.77			V. 8											

			TAB	LE VI-3	DIS	TRIBUTI	ON OF N	ORTHE	RLY WIN	D\$			ИО	RTHERL	Y WIND	DISTRIB	OITU
STAT	ION:			SANT	A MONI	CA, CAL	IFORNI					 	十		,	-	
REFE	RENCE	PERIOD:		FEBR	UARY								s	ANTA M	ONICA, (CALIFO	RNIA
STAT	ION ELE	VATION	:	125 fe	et or 38	l meter	• MSL		•					7	FEBRUAR	₹¥	
STAT	ON COO	RDINAT	ES:	34.01	deg N.	116.27 d	eg W										
PERIC	D OF O	BSERVA	TION:				Janua										
			. , ,				ia Apri		56-Dece	nber 31.	1960		1,75	OF OBS			
DATA	SOURCE	•:		U. S.	Weather	Bureau rth Caro		••					NO.	OF OBS	. FOR E.	ACH LE	VEL
PREP	ARED BY	Y: -		Nation	al Aeros	nautice a	nd Space Center,	Aeroball	listics Di	vision					UNITS		
	,		,	Aerop Febru	hysics a ary 23,	1962	physics							- m	eters/me	cond	
Alt. MSL)	No. of N'ly	Min. Speed.	Pet. Freq.	0.135	2.20	I	SUMULA 50.0	TIVE PI		90.0	95.0	Y 97.72	00.0	99. 165	Max. Speed	Freq.	Alt. (MSI
km •fc	Winds 272	0.0	41.54	0.135	2.28	15.9	0.3	1.1	2,0	2.7	4.0	5.9	99.0 7.0	7.8	8.0	1.10	•fc
1	304	0.0	32.89				0.9	2.2	4.5	5.6	7.5	9.0	13.9	21.5	22.0	0.33	1
2	357	0.0	10.36			0.5	2.9	4.7	7.1	8.4	10.6	13.9	15.4	19.5	20.0	0.28	2
3	361	0.0	5.82			1.0	5.2	7.4	11.3	13.4	16.2	18.2	20,3	21.5	22.0	0.28	3
4	347	0.0	4.32			1.4	6.3	9.1	13.9	16.8	19.7	21.3	22,5	36.5	37.0	0. 29	1
5	337	0.0	5.04			1.7	7.2	11.3	16.9	19.6	22.5	26.1	30.5	47.5	48.0	0.30	5
6	329	0.0	4. 26			2.2	7.7	13.0	18.9	23.0	25.9	32.4	37.3	48.5	49.0	0.30	6
7	325	0.0	3.69			2.1	9.0	14.8,	21.4	24.0	30.5	38.5	45.7	63.5	64.0	0.31	7
8	314	0.0	3.18			3.2	11.5	18.4	24.5	28.5	35,4	39.9	47.8	73.5	74.0	0.32	8
9	312	0.0	2.24		0.0	3.4	12.9	19.8	28.0	31.5	38.2	43.9	53.8	65.5	66.0	0, 32	9
10	311	0.0	1.93		0.1	3.8	14.6	22.0	31.8	35.6	40,4	44.9	50.9	57.5	58.0	0.32	10
11	314	0.0	3.82			3,7	14.2	21.6	31.6	37.5	44.3	48.9	54,8	60.5	61.0	0. 32	11
12	305	0.0	1.31		0.4	3.7	13.2	20.9	28.3	33.5	40.2	48.0	54.9	62.5	63.0	0.33	12
13	305 300	0.0	2.67		0.2	3.5	9.9	15.9 15.0	26. 1 22. 5	31.3 27.6	39.7 35.0	43.3 42.0	46.9	62.5 45.7	63.0	0.33	13
15	299	0.0	1.67		0.2	2.5	8.8	12.5	18.0	20.5	25, 2	27.7	32.0	37.5	46.0 38.0	0.67	14
16	301	0.0	2.33		J	1.8	7.1	10.2	15.1	17,7	19,9	25.0	27.4	31.5	32. O	0.33	16
17	304	0.0	2.96			1.3	5.6	8.4	11.6	13,4	16, 2	18.0	19.9	24.5	25.0	0. 33	17
18	310	0.0	9.35			0.6	3.9	6.7	9.4	11.3	13,4	15.4	16.9	22.5	23,0	0. 32	18
19	339	0.0	11.80			0.2	2.8	4.8	6.8	8.5	10,6	12.1	14.3	18.5	19.0	0. 29	19
20	362	0.0	13.26			0.1	2,5	3.8	5.4	6.4	7.6	8.9	14,3	20.5	21.0	0.28	ZO
21	365	0.0	15.07			0.0	1.9	3. 2	4.8	5.7	6.9	9.8	13.3	20.5	21.0	0.27	21
22	372	0.0	18.01				1.5	2.6	4.5	5.4	6.8	8.8	12.2	19.4	20.0	0.27	22
23	372	0.0	18.55				1.4	2.4	4.4	5.4	6.5	7.7	8.8	14.4	15.0	0.27	23
24	371	0.0	20.49				1.2	2.2	4.3	5.2	6.5	8.0	8.6	10.8	11.0	0.81	24
25	386	0.0	16. 32		•		1.5	2.8	4.6	5.7	7.1	9.0	10.5	12.4	13.0	0. 26	25
26	387	0.0	10.59			0.3	2.2	3.5	5.4	6.8	8.3	9.3	10.3	11.7	12.0	0.52	26
27	386	0.0	11.14			0.3	2.6	4.1	5.7	6.8	8.4	11.0	13.5	16.4	17.0	0.26	27

		-	TAB	LE VI-4	DIST	RIBUTI	ON OF N	ORTHER	I.Y WINI	05			NOI	RTHERL	Y WIND	DISTRIB	UTION
STATI	ON:			SANTA	MONIC	A, CALI	FORNIA			~		,					
REFER	RENCE I	ERIOD:	_	MARC	H								S.	ANTA MO	ONICA, C	ALIFO	RNIA
STATI	ON ELE	ATION-		125 fe	et or 38	l meter	∎ MSL								MARCH		
STATI	ои соог	PDINATI	is:	34.01	deg N. 1	18.27 de	g W	······································			-						
PERIO	D OF OF	SERVA	TION:	Long I	Beach C	alifornia Californ	Janua:	ry 1, 199	6-April	17, 1956 nber 31.	1960					-,	
DATA	SOURCE	·					rds Cente						NO.	OF OBS.	FOR E	ACH LEV	VEL
				Ashev	Weather ille, Nor	th Carol									620		
יים איו	ARED BY			Marsh	all Space	Flight	nd Space Center	∧erob ali	istics Di	vision					UNITS	:	
					hysics ar ary 23, l		physics I	Branch.	(lunts: i))	e, Alaba	1112	· · · · · · · · · · · · · · · · · · ·		m	eters/se	cond	,
Alt. (\(SL)	No. of N'ly	Vin. Speed.	Pot. Freq.				COMOLA						_		Max Speed	Pet. Preq	(MS1)
km	Winds	<u>'</u>		0.135	2.28	15.9	50.0	6F.0	64. I	90.0	95.0	97.72	99.0	99 +65			kin
sfc	279	0.0	41.94				0.3	1.2	2.4	3,3	5.0	7.1	9.2	12.6	13.0	0.36	•fc
1	358	0.0	27.09				1.3	2.9	6.0	7.6	9.6	11.2	13,1	15.5	16.0	0.28	'
Z	397	0.0	12.59			0. Z	2.8	4.4	6.7	8.7	11.5	13.9	17.0	22.4	23.0	0.25	2
3	403	0.0	8.68			0.7	4.4	6.6	9.6	11.9	15.5	18.8	21.9	37.4	38.0	0.25	3
4	415	0.0	6.99		1.2 4.9 8.1 11.8 13.8 17.7 22.1 1.6 6.4 9.0 12.5 15.9 20.3 23.4									31.4	32.0	0.24	4
5	395	0.0	4.81		1.6 6.4 9.0 12.5 15.9 20.3 23.9									31.4	32.0	0. 25	5
6	390	0.0	6.67			1.5	6.9	10.5	14.9	18.1	21.6	26.2	27.5	39.4	40.0	0.26	6
7	376	0.0	4.79			1.8	7.8	11.7	17.4	19.3	24.5	29.4	37.2	44.4	45.0	0.27	7
8	375	0.0	4.53			1.9	8.3	13.4	18.8	23.0	25.7	34, 2	41,2	47.4	48.0	0.27	8
9	372	0.0	2.69			2.0	8.2	13.7	21.1	25.6	30.4	36.5	44.2	49.4	50.0	0.27	9
10	338	0.0	2.66			2.1	9.7	15.7	22.0	27.7	33.0	40.1	43.8	62.5	63.0	0.30	10
11	327	0.0	5.81			2.1	11.0	16.0	23,7	27.4	30.6	35.5	42.3	49.5	50.0	0.31	11
12	310	0.0	2.90			2.5	9.3	14.1	21.4	24,7	27.3	33.4	36.4	42.5	43.0	0.32	12
13	302	0.0	3.64			1.8	6.8	12.0	17.2	19.5	23.9	28.5	31.9	43.5	44.0	0.33	13
14	287	0.0	2.79			2.0	5.9	9.1	14.6	16.8	20.6	22.8	26.0	27.6	28. O	0.35	14
15	291	0.0	5.84			1.2	5.3	8.1	11.9	13.9	16.1	17.1	18.5	24.6	25.0	0.34	15
16	310	0.0	6.77			0.9	4.2	6.5	9.9	11,8	13.9	15.2	15.8	18.5	19.0	0.32	16
17	319	0.0	7.21	1		0.6	3.3	5.5	7.5	8.9	11.3	13.1	14.8	20.5	21.0	0.31	17
18	353	0.0	14.16	1		0.1	2.4	3.9	5.9	7.2	8.7	10.6	13.3	16.5	17.0	0.28	18
19	387	0.0	13.44			0.1	1.9	3.3	5.3	6.2	7.6	9.0	10. I	16.4	17.0	0.26	19
20	396	0.0	15.15			0.0	1.6	2.7	4.2	5.2	5.8	6.8	8.0	10.4	11.0	0.25	20
21	404	0.0	14.85			0.0	1.4	2.4	3.6	4.2	4,9	5.8	6.9	12.4	13.0	0.25	21
22	412	0.0	19.90				1.2	2.3	3.6	4.4	5,6	6.4	6.9	11.4	12.0	0.24	22
23	413	0.0	16.95				1.2	2.1	3.5	4.3	5,5	7.0	7.9	10.4	11.0	0.24	23
24	385	0.0	17.66				1.1	2, 2	3.4	4.1	4.9	7.0	10.1	11.8	12.0	0.78	24
25	342	0.0	17.25	İ			1.2	2.2	3.6	4,6	6. 1	7.4	8,8	11.5	12.0	0.29	25
26	379	0.0	17.68	1			1.3	2.3	4.1	5.0	7.0	8.5	9.6	11.4	12.0	0.26	26
27	380	0.0	14.74]	0.0	1.4	2.4	4.1	5.6	7.2	8.9	9.7	12.4	13.0	0.26	27

			TAB	LE VI-5	DIS	TRIBUTI	ON OF N	ORTHE	RLY WIN	DS			иои	RTHERL	Y WIND	DISTRIB	UTIO
STAT	ON:			SANTA	A MONIO	A. CAL	IFORNIA			,			-				
PEFE	RENCE I	PERIOD		APRII	٠.								. S.	N ATKA	ONICA,	CALIFO	AIN
STATI	ON ELE	VATION	:	125 (e	et or 39	1 meter	• MSI-								APRIL		
STATI	ON COO	PDINATI	ES:	34.01	deg N.	118.27 d	ед W										
PERIO	D OF O	SERVA	TION:							17. 1956			· · · · · · · · · · · · · · · · · · ·				
							•		56-Dece	nber 11.	1960		1,,,				
DATA	SOURCE	: :		U. S.	Weather	her Raco · Bureau rth Carol	rds Cent	er				+	NO.	OF OBS	FOR E	ACH LE	VEL,
PREP.	APED BY	<i>(</i> ·	,	Nation	al Aero	nautica a e Flight	nd Space Center,	Aeroball	istics Di	vision					UNITS	:	
					пулся а ату 23,	1962				le, Alaba				n	eters/se		
Ali MSL)	No. of N'ly	\lin. Speed.	Pet. Freq.	0.135	2.28	15.9	50.0	68.0	5RCENT 84.1	90.0	95.0	97.72	99 0	29 165	Max Speed	Pet. Fr e q.	(NIS)
km sfc	Winds 184	0.0	41.30	0.117	2.20	17.7	0.3	1.1	2.1	2.8	6.2	7.9	12.0	12.8	13.0	1.09	efc
1	338	0.0	28.70				1.0	2.2	4.7	6.4	8.7	11.1	14.5	19.5	20.0	0.30	,
. 2	350	0.0	17.14				2.2	3.6	5.6	7.4	10.3	14.0	15.5	20.5	21.0	0.29	Z
3	371	0.0	9.16			0.6	3.6	5.3	7.8	10.2	12.8	16.2	20.2	27.4	28.0	0.27	
4	374	0.0	7. 75			1.0	4.5	6.9	10.2	11.7	14.1	18.4	23.6	40.4	.41.0	0.27	4
5	376	0.0	7.18			1.1	5.4	8.6	11.8	14.2	17.4	22.1	26.6	49.4	50.0	0.27	5
6	373	0.0	5.63			1.3	6.3	9.6	13.3	15.6	21.0	24.8	29.2	45.4	46.0	0.27	6
7	368	0.0	6.52			1.7	7.2	10.6	15.2	19.1	25.3	30.3	35.3	49.5	50.0	0.27	7
8	370	0.0	5.41			1.9	7.9	11.4	18.0	21.8	27.5	34.7	46.3	54.5	55.0	0.27	8
9	354	0.0	5.65			2.6	8.4	13.7	21.1	24.9	29.8	35.9	49.4	59.5	60.0	0.28	9
10	358	0.0	5.03			2.4	9.0	13.8	20,8	25.0	32.0	39.4	46.4	57.5	58.0	0.28	10
11	352	0.0	4,55			2.2	9.7	15.1	22.0	25.7	31.7	37.9	40.4	45.5	46.0	0.28	11
12	331	0.0	3.63			2.0	9.1	13.2	21.2	23.9	29.4	33.1	34.6	45.5	46.0	0.30	12
13	314	0.0	5.73			1.6	7.1	10.5	18.3	22.3	26.6	30.9	32.9	36.5	37.0	0. 32	13
14	282	0.0	3.55	İ		1.6	6.3	9.2	16.5	21.1	24.4	28.5	32. 1	34.8	35.0	0.71	14
15	275	0.0	9.09			0.6	4.6	7.4	13.3	17.7	21.7	25.8	28.1	31.6	32.0	0. 36	15
16	284	0.0	8.10			0.5	3.7	6.0	10.8	13.4	18.4	21.9	26.0	27.6	28.0	0.35	16
17	287	0.0	13.59			0.1	2.7	4,3	8.4	11.5	13.7	16.8	19.0	20.6	21.0	0.35	17
18	290 295	0.0	15.86 17.63			0.0	1.9	3.6 3.0	7.0 5.5	9. 1 6. 5	8.2	13. I 9. 8	15, 1	16.8 12.8	17.0	0.69	18
20	312	0.0	22,44				1.7	2.4	4.0	4.8	5.8	6.7	7.9	9.5	10.0	0.68	19 20
21	318	0.0	26.10				1.0	1.8	3.3	4.4	5.3	5.9	6.9	9.5	10.0	0.32	21
22	316	0.0	21.52	İ			1.1	2.0	3.3	4.0	5.4	6.1	6.6	9.5 8.5	9.0	0.31	22
23	318	0.0	18.55				1.1	2.0	3. Z	3.9	5.1	6.2	6.9	8.5	9.0	0.32	23
24	347	0.0	24.78				0.8	1.8	3. Z	3.9	5.1	5.8	7.5	8.8	9.0	0.86	24
25	344	0.0	20.64				1.0	1.9	3.0	3.8	5.3	6.5	7.5	9.5	10.0	0.29	25
26	312	0.0	26.60				1. I	2.2	3.7	4.6	5.8	7.6	8.9	13.5	14.0	0.32	26
	325	0.0	26.77	ĺ			1.0	1.9	3.5	4.6	6. 1	8.7	12,7	17.5	18.0	0, 31	27

			TAB	LE VI-6	DIST	RIBUTI	ON OF NO	RTHER	LY WINI	>5			NOR	THERLY	WIND	DISTRIBL	иогт
STATI	ON:		-	SANT	MONIC	A, CAL	IFORNIA				*			NTA M	SUCA C	ALIFOR	NIA
PEFE	RENCE F	ERIOD:		MAY									- 1	rs IV are	MICA, C	,7(1.1)	HIA
STATI	ON ELEV	ATION:		125 (e	t or 3P	l meter	• MSL						L		MAY		
STATI	ON COOL	DINAT	ES:	34.01	deg N. I	18.27 de	g W										
PERIC	D OF OF	SERVA	rion:	Long I	Seach C	alifornia Californ	Januar ia April	ry 1, 195 1 18, 195	6-April 6-Decen	17, 1956 aber 31,	1960						
DATA	SOURCE	1		Nation	al Weath	er Reco	rde Cente						NO.	OF OBS.	FOR E	ACH LEV	EL
					Weather lie, Nor		lina.								620		
PRED	ARED BY			Nation	al Aeron	autice a	nd Space Center. /	\eroballi	stics Di	ision			-		UNITS		
				Aeropi Febru	nysics ar ary 23, 1	d Astro 1962	physics F	Tanch,	lunts: ill	e, Alaba	ına			m	eters/se	_	
Alt. (MSU)	No. of N'ly	Min. Speed.	Pet. Freq.				COMOLA	TIVE PE							Max Speed	Pet. Freq	AIL (NIST.
lem	Winds	11		0.135	2, ZH	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99 ∤65		0 67	kın
∎fc	149	0.0	45.64				0.1	0.7	1,5	1.8	2.5	2.9	4,5	5.7	6.0	0.67	efc ,
1	309	0.0	30.74				0.7	1.6	3.4	4.6	6.2	8.3	9.9	15.5	16.0	0.32	2
2	326	0.0	17.79				1.7	3.2	5.4	6.5	8.2	10.3	11.3	15.5	16.0	0.31	3
3	302	0.0	13.58			0.1	2.6	4.4	6.4	7.9	10.2	12.0	13.3	14.5	15.0		
4	297	0.0	7.74			0.6	4.0	6.3	9.1	10.4	13.5	17.0	20,0	22.5	23.0	0.34	1
5	290	0.0	8.28			0.6	5.1	7.9	11.4	12.9	14.9	20.1	23.3	24.6	25.0	0.34.	5
6	294	0.0	8.84	ļ		0.6	5.6	9.5	13.5	16.6	20,6	23.4	27.0	28.8	29.0	0.68	6
7	294	0.0	5.78			1.1	6.7	11.0	15.3	18.9	23,1	26.6	30.0	34.6	35.0	0.34	7
8	289	0.0	4.50			1.5	7.5	12.0	18.3	21.2	24.5	32.4	38.1	40.6	41.0	0.35	8
9	278	0.0	5.76	1		1.7	8.4	13.4	18.7	22.5	29.5	34.2	40.2	42.6	43.0	0.36	9
10	281	0.0	5.69			1.5	9.6	14.3	20.4	25.4	29.4	35.5	37.1	45.8	46.0	0.71	10
11	278	0.0	6.12			1.7	8.9	15.3	21.5	24.8	29.1	34.6	37.2	40.6	41.0	0.36	11
12	272	0.0	5.51			1.5	8.0	12.3	17.9	22.1	26.1	29.8	33.2	34.8	35.0	0.74	12
13	262	0.0	7.63	1		1.1	6.6	9.4	14.0	16.2	20.1	24,3	25.6	26.8	27.0	0.76	13
14	252	0.0	6.75			1.0	5.0	8.0	11.1	12.6	15.4	17.0	19.4	25.6	26.0	0.40	14
15	237	0.0	8.02			0.5	3.5	5.7	9.0	10.8	12.5	13.8	15.6	17.6	18.0	0.42	16
16	213	0.0	15.49			0.0	2.6	4.5	6.9	8.7	9.9	10.8		14.7	15.0	1	17
17	195	0.0	16.92	1	1		1.6	2.8	4.7	5,5	7.0	8.2	9.5	11.7	12.0	0.51	18
18	214	0.0	28.50				0.8	1.7	3.1	3.8	5.1	8.0	8.9	10.8	12.0	0.43	19
19	231	0.0	32.03				0.7	1.7	3, 0 2, 4	3.9	4.8	6.5 5.6	7.7	10.6	11.0	0.45	20
20	280	0.0	32.14				0.6	1.3		3,0	4.4	5.5	6.6	7.8	8.0	0. 75	21
21	267	0.0	35.96				0.4	1.1	2.1	l	4.2		5.8	12.6	13.0	0.15	22
22	296	0.0	33.11	l			0.5	1.2	2.3	3.0 2.8	3.7	5.0	5.7	6.7	7.0	0.63	23
23	318	0.0	34.91				0.5	1.2	2.3		į	4.9	6.5	8.5	9.0	0.30	24
24	337	0.0	35.61	ì	1		0.5	1.4	2.7	3,6	4.6	5.6	i	1		j	1
25	338	0.0	32.54	t			0.7	1.7	2.9	3,7	4.8	5.6	6.3	10.5	11.0	0.30	25
26	355	0.0	28.73				0.9	1.8	2.9	3.6	4.5	5.5	6.4	14.5	15.0	0.28	
27	370	0.0	23.78		l		0.9	1.7	2.9	3.8	4.7	5.9	7.1	8.5	9.0	0.27	27

			TAE	SLE VI-7	DIS	TRIBUT	ON OF N	ORTHE	RLY WIN	IDS			NO	RTHERL	Y WIND	DISTRIE	UTION
STAT	ION-			SANT	A MONIC	CA, CAI	IFORNIA	<u> </u>									
RÉFE	RENCE	PERIOD		JUNE			-						S	ANTA M	ONICA.	CALIFO	RNIA
STAT	ION ELE	VATION	•	125 fe	et or 38	1 meter	ra MSL								JUNE		
STAT	ION COO	PDINAT	ES:	34.01	deg N.	118.27 d	og W							·	•		
PERIO	DD OF O	BSERVA	TION:)56-April 					·			
DATA	SOURCE	<u></u>			nal Weath		rds Cent	ler					NO.	OF OBS	. FOR E	ACH LE	VEL
				Ashev	ille. No:	th Caro	lina				<u>-</u>				600		
חפאיו	ARED B	γ:		March	sall Spac	e Flight	nd Space Center,	Aerobal	stration listics D: Hunts:	ivision					UNITS		
	, 	1			ary 23.	1962								m	eters/se	cond	
Alt. (MSL)	No. of N'ly	Min. Speed.	Pct. Freq.		Γ	Г		1	ERCENT	1	1				Max. Speed	Pet. Freq.	Alt. (NISI.
kın	Winds	 	-	0.115	2,28	15.9	50.0	68.0	64.1	90.0	95.0	97.72	99.0	99 165	·		kın
sfc ·	132	0.0	59.09					0.2	0.7	0.8	1.2	1.7	1.9	2.8	3.0	0.76	sfc .
1	325	0.0	29.54				0.7	2.6	3.0	6.0	5.6 7.4	7.1	8.3	9.7	10.0	0.62	1
2	264	0.0	27.65 20.98				1.2	3.6	4.7 5.7	7.4		9.6	12.3	15.6	16.0	0.38	2
3							1	1			8.8		9.9	11.8	12.0	0.89	3
4	217	0.0	21.20				2.0	3.5	6.0	6.8 8.6	8.5	10.0	11.6	12.7	13.0	0.46	4
5	212	0.0	18.87				2.3	4.0	6.3		1	12.0	12.7	13.7	14.0	0.47	5
6	220	0.0	11.82			0.3	2.9	4.9	8.1	10.5	12.7	14.9	15.9	23.7	24.0	0.45	6
7	236	0,0	13.14			0.2	3.5	5.7	8.9	10.5	12.5	15.8	25.6	28.6	29.0	0.42	7
8	231	0.0	8.66 7.79			0.9	4.5	7.6	10.2	11.8	14.4 18.3	17.7 22.7	35.6	41.6	42.0	0.43	8
9	231	0.0	8.52			0.9	4.5 5.4	8.3	13.5	15.3	20.8	30.4	41.6	47.6 49.6	48.0 50.0	0.43	9
11	215	0.0	7. 91			1.1	5.9	9.7	14.9	17.8	24.2	30.6	34.8 39.8	52.7	53.0	0.45	10
12	201	0.0	6,47			1.1	6.3	9.1	14.3	17.8	23.7	27.4	41.9	48.7	49.0	0.50	11
13	173	0.0	6.94			1.0	4.8	7.6	11.6	15.5	20.3	31.0	36.2	37.7	38.0	0.50	13
14	154	0.0	9.74			0.4	3.5	6.1	8.9	12.5	16.3	22.1	22.8	24.7	25.0	0, 65	14
15	134	0.0	20.90			-··	2.7	4.5	7.1	8.8	12.6	14.4	16.6	18.8	19.0	0. 65	15
16	129	0.0	21.71				1.7	3. 2	4.9	6.3	8.7	11.0	12.7	13.8	14.0	0.78	16
17	149	0.0	22.15				1,2	1.9	3.4	4.8	5.9	7.5	8.2	8.8	9.0	1.34	17
18	163	0.0	23.31				1.0	1.8	2.8	3.9	4.7	6.1	7.1	7.8	8.0	1.23	18
19	179	0.0	32.40				0.5	1.2	2.3	2.8	3.7	4.9	5.7	6.7	7.0	0.56	19
20	215	0.0	30.23				0.5	1.1	1.8	2,3	2.9	3.5	3.9	4.8	5.0	0.93	20
21	236	0.0	40.68				0.2	0.8	1.7	2,2	3.4	4.3	5.6	8.6	9.0	0. 4Z	21
22	268	0.0	39.18				0.3	0.9	1.7	2. 2	2.8	3.9	4.6	8.6	9.0	0.37	22
23	274	0.0	34. 67				0.4	1.1	1.8	2.3	2.9	4.3	8.2	10.8	11.0	0.73	23
24	274	0.0	35.40	I			0.4	1.1	2.0	2.6	3.5	4.4	6.2	8.6	9.0	0.36	24
25	284	0.0	26.41	1			0.7	1.5	2.4	2.9	3.7	4.4	5.1	9.6	10.0	0. 35	25
26	283	0.0	29.68				0.7	1.5	2.5	3.1	3.8	4.7	6.0	6.8	7.0	1.06	26
27	266	0.0	15.41		Ì	0.0	0.9	1.6	2.6	3.1	4.4	5.7	6.7	7.8	8.0	0.75	27
														1			

NOTE: (1) When the percent frequency of minimum speed exceeded 2.26 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

			TAB	LE VI-8	DIST	RIBUTI	ON OF N	ORTHER	LY WIN	9			NOI	THERL	Y WIND I	DISTRIB	UTION
STATI	ON:			·SANT	MONIC	A. CAL	IFORNIA						T				
REFE	RENCE F	ERIOD:		JULY									S.	ANTA MO	ONICA, C	ALIFO	INLA
STATI	ON ELE	VATION:		125 fe	et or 3P	l meter	• MSL								JULY		
STATI	ON GOO!	DINATI	₹ 5 :	34.01	deg N. 1	18.27 d	g W					,					
PERIC	D OF O	SERVAT	rion:				Janua: da Apri										
DATA	SOURCE	:					rds Cente						NO.	OF OBS	FOR EA	CH LE	VEL
					Weather		ina								620		
LBED	ARED BY	7 :		Nation	al Asron	autice a	nd Space Center.	Adminis	tration	vision	· · · · · · · · · · · · · · · · · · ·				UNITS:		
			<u>.</u>	Aerop	hysics at	ad Astro	physics !	Iranch,	[[unteril]	e, Alaba	ım a			131	eters/se	cond	
Alt. (MSL)	No. of N'ly	Min. Spead.	Pct. Freq.			,	CUMULA	TIVE P	RCENT	AGE FILI	OUESC	γ ·			Max. Speed	Pet. Freq	Alt.
km	Winds	Speeti.	1 64	0.135	2. 2H	15.9	50.0	68.0	64.1	90.0	95.0	97.72	99.0	99.165			km
efc	109	0.0	61.47					0.1	0.6	0.8	1.1	1.7	1.9	2.8	3.0	0.92	efc
1	233	0.0	47.64				0.0	0.8	2.2	2.9	3.9	5.4	6.6	9.8	10.0	0.86	1
2	213	0.0	29.58				0.6	1.4	2.5	3.2	4.2	4.8	5.4	10.7	11.0	0.47	2
3	132	0.0	36.36				0.5	1.3	2.6	3.6	4.7	6.3	6.8	. 7. 8	8.0	0.76	3
4	103	0.0	36.89				0.5	1.4	2.8	3.7	4,5	4.9	5.9	7.8	8.0	0.97	4
5	85	0.0	34.12				0.7	1.9	3.0	3.6	4.2	5.0	5.5	5.9	6.0	2.35	5
6	86	0.0	31.40				0.7	1.6	2.8	3.6	4,4	4.8	6. 1	6.8	7.0	1.16	6
7	104	0.0	27.88				0.8	1.9	3. I	3:8	5.6	8.3	8.9	10.8	11.0	0.96	7
8	99	0.0	22.22				1.3	2.6	5.0	6.1	6.8	7.5	9.0	9.8	10.0	1.01	8
9	102	0.0	27.45		,		0.8	2.7	6.8	8.2	9.9	11.6	12.9	14.8	15.0	0.98	9
10	93	0.0	24.73				1.4	3.1	7.7	8.9	11.3	11.9	13.5	13.9	14.0	2.15	10
11	91	0.0	14.29			0.0	1.9	4.9	8.1	9.7	12.4	13.9	15.5	15.9	16.0	2.20	111
12	89	0.0	7.87			0.6	2.8	5.2	8.9	12.1	12.7	13.3	13.7	13.9	14.0	3.37	12
13	104	0.0	11.54			0.1	2.7	5.0	8.3	9.1	10.4	11.5	11.9	14.8	15.0	0.96	13
14	100	0.0	16.00			-	2.4	3.8	6.1	7.3	9.0	10.7	12.0	12.8	13.0	1.00	14
15	103	0.0	23.30				1.2	2.3	4.2	5.1	5.8	6.8	8.9	9.8	10.0	0.97	15
16	102	0.0	34. 31				0.8	1.6	2.9	3.8	5.4	6.5	6.9	7.8	8.0	0.98	16
17	141	0.0	24.82				1.1	1.9	2.9	3,5	4.1	4.9	6.2	6.9	7.0	1.42	-17
18	163	0.0	31.90				0.7	1.5	2.4	2.8	3.5	4.0	4.5	4.9	5.0	2.45	18
19	189	0.0	38.10				0.3	0.8	1.9	2.6	3.4	3.8	4.3	4.9	5.0	1.59	19
20	214	0.0	46. 26				0.1	0.9	1.6	1.9	2.7	3.4	3.8	4.7	5.0	0.47	20
21	218	0.0	42.20				0.2	0.8	1.7	2.1	2.7	3.0	3.9	5.7	6.0	0.46	21
22	214	0.0	43.93				0.1	0.7	1.5	1.9	2.5	3.0	3.7	4.7	5.0	0.47	22
23	227	0.0	40.97				0.2	0.7	1.5	1.8	2.4	2.9	3.4	3.9	4.0	1.76	23
24	239	0.0	34.31				0.4	0.9	1.6	2.0	2.8	3.5	3.9	4.8	5.0	0.84	24
25	236	0.0	27.97]		0.5	1.1	1.9	2.5	3.1	3.9	4.6	5.6	6.0	0.42	25
26	219	0.0	25.11				0.6	1.1	1.9	2.6	3.6	5.6	6.9	8.8	9.0	0.91	26
27	235	0.0	20.85				0.7	1.4	2.3	2.9	4.2	4.7	6.3	12.6	13.0	0.43	27

74				-									_			سس	
			TAE	LE VI-9	DIST	TRIBUTI	ON OF N	ORTHE	RLY WIN	DS			МОТ	RTHERL	Y WIND	DIŞTRIB	UTION
STAT	ION:	· · · · · · · · · · · · · · · · · · ·		SANT	A MONIC	A, CAL	IFORNIA										
PEFE	RENCE	PERIOD:		AUGU	ST								S.	ANTA M	ONICA,	GALIFO.	RNIA
STAT	ON ELE	VATION	:	125 fe	et or 3F	1 meter	• MSL						L	,	UGUST		
STATI	ON COO	PDINAT	ES:	34.01	deg N.	18.27 d	g W				····						
PERIC	D OF O	SERVA	TION:						56-April 56-Dece								
DATA	SOURCE);	·		al Weath		rde Cent	er	4				NO.	OF OBS	FOR E.	ACH LE	VEL
PRED	ARED BY	<i>(</i> .			ille. Nor			Admini	tration	 -					620 UNITS		
	A			\!arsh Aerop	all Space hysics a	e Flight nd Astro	Center,	Aeroball	istics Di Huntsvil	vision le, Alaba	ıma			m	eters/se		
Alt.	No, of	Min.	Pet.	PODTIL	ary 23,		CUMULA	TIVE P	ERCENT.	AGE FEI	COUENC	Y			Max	Pet.	Alt.
(MSL) jem	N'ly Winds	Speed.	Freq.	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99 +65	Speed	Freq	(MSL) ken
efc	127	0.0	66. 93					0.0	0.6	0.9	1.7	2.7	3.3	3.9	4.0	1.57	sfc
1	230	0.0	50.43					0.6	1.4	1.9	2.8	4.9	5.9	7.6	8.0	0.43	1
2	163	0.0	41.72				0.2	0.9	2.4	3.4	5.9	7.6	8.3	9.7	10.0	0.61	2
3	132	0.0	29.55				0.9	1.7	3.6	4.5	5.6	6.4	6.9	7.8	8.0	0.76	3
4	136	0.0	36.76				0.6	1.6	2.9	3.7	4.7	5.9	6.8	8.8	9.0	0.74	4
5	138	0.0	31.16				0.8	1.7	2.7	3, 3	4.0	5.9	8.6	9.8	10.0	0.72	5
6	153	0.0	20.26				0.9	2.0	3.0	3.6	4.5	5.7	11.4	12.7	13.0	0.65	6
7	131	0.0	20.61				1.2	2.3	3, 7	4.6	6.1	9.0	11.6	12.8	13.0	0.76	7
8	135	0.0	21.48				1.4	2.5	4.3	5.9	7.8	9.4	10,6	11.8	12.0	0.74	8
9	126	0.0	24.60				1.5	2.6	4.9	6.5	8.3	9.1	10.7	12.8	13.0	0.79	9
10	105	0.0	15.24			0.0	2.2	3.9	6.4	7.5	9.5	10.8	13.9	15.8	16.0	0.95	10
11	106	0.0	12.26			0.2	3.1	6.0	7.8	9.5	10.9	12.7	14.9	16.8	17.0	0.94	11
12	90	0.0	12, 22			0.1	Z. 8	5.5	8.5	9.6	11.3	11.9	16.1	16.8	17.0	1,11	12
13	80	0.0	17.50				2.6	4.4	6.8	7.8	10.0	12.1	13.2	13.8	14.0	1.25	13
14	70	0.0	21.43				2.0	3.8	6.4	7.1	7.9	8.4	8.7	8.9	9.0	4.29	14
15	70	0.0	20.00				1.7	2.8	5.7	6.6	7.7	8.7	16.3	16.9	17.0	1.43	15
16	100	0.0	29.00				1.0	2.0	3.3	4.2	5.5	7.3	8.0	8.8	9.0	1.00	16
17	133	0.0	27.82				0.7	1.6	2.5	2.9	3,6	4.3	4.8	5.8	6.0	0.75	17
18	168	0.0	35.71				0.4	0.9	1.8	2.3	2.8	3.5	4.3	5.7	6.0	0.60	18
19	224	0.0	44.20				0.2	0.8	1.9	2.5	3.4	4. Z	4.9	6.6	7.0	0.45	19
20	207	0.0	44. 93				0.1	0.8	1.6	1.9	3.5	4.8	5.9	9.7	10.0	0.48	20
21	244	0.0	38.93				0.2	0.7	1.5	2.0	2.8	4.1	4.8	5.8	6, 0	0.82	21
22	277	0.0	35.74				0.4	0.9	1.8	2.4	3.4	4.7	6.0	6.8	7.0	1.08	22
23	256	Ø. Q	30.08				0.5	0.9	1.9	2.4	.3.1	3.9	4.6	7.6	8.0	0.39	23
24	265	0.0	29.06				0.6	1.2	1.9	2.5	3.4	3.9	5.1	5.8	6.0	1.13	24
25	263	0.0	26.62				0.6	1.3	2.3	2.8	3.4	3.9	4.7	5.8	6.0	0.76	25
26	270	0.0	23.70				0.6	1.2	2.1	2.7	3.6	4.5	5.4	6.6	7.0	0.37	26
27	270	0.0	20.00				1.0	1.7	2.6	2.9	3, 6	4.2	4.6	4.9	5.0	2.96	27

			TAB	LE VI-10	DIST	RĮBUTIC	ON OF NO	RTHER	LY WIND				NOR	THERLY	WIND D	ISTRIBU	JTION
STATI	ON:			SANTA	MONIC	A, CALI	FORNIA	-						NT 1 110		VI IEON	NITA
PEFE	RENCE F	ERIOD:		SEPTE	MBER								- 54	es rac sic	NICA, C	Alarva	NIA
STATI	ON ELEV	ATION:		125 fee	et or 3P.	l meteri	MSL				-		<u></u>	ŞI	ертемв:	ER	
STATI	ON COO	DINATE	S:	34.01	deg N. 1	18.27 de	g W								-		
PERIC	D OF O	SERVAT	ION:	Long I	Seach C	alifornia Californ	Januar (a April	y I, 19 ⁴ I IF, 19 ⁴	66-April 66-Deceir	17, 1956 ber 31,	1960						
DATA	SOURCE	\ \					da Cente	ır					NO.	OF OBS.	FOR E	CH LEV	/EL
				Ashevi	Weather lle. Nor	th Carol									600		
PRED	APED BY	7 -		March	all Space	Flight	od Space Center,	\eroball	istics Div	leion					UNITS:		
				Aeropi Febru	hysics an ry 23, l	962			Hunts (1)					m	eters/se		
Alt.	No. of N'Iy	Min. Speed.	Pct. Fraq.			(UMULA	TIVE PE	ER CENT/	GE FIS	OUENCY	· · ·			\tax \pned	Pet. Pr eq .	(7151.)
(MSL) km	Winds	speen.	r red.	0.135	2.28	15.9	50.0	6P.0	64.1	90.0	95 0	97. 72	99.0	99 165			km_
€fc	171	0.0	60.23				0.1	0.2	. 0.8	1.2	1.7	2.0	2.5	2.9	3.0	2.34	#fc
1	232	0.0	45.26				0.1	0.8	2.1	2.7	4.3	5.1	5.7	6.6	7.0	0.43	'
2	194	0.0	27.32				1.1	2.3	3.8	4.7	6.1	8.7	10.0	13.7	14.0	0.52	Z
3	187	0.0	20.86		1.7 3.7 5.1 6.1 8.1 8.9 1										16.0	0.53	3
4	183	0.0	15.30												20.0	0.55	4
5	165	0.0	12.12]		0.2	3.5	6.2	9.9	11.6	13.7	16.4	17.3	21.7	22.0	0.61	5
6	182	0.0	12.64	ŀ		0.2	3.2	6.1	11.0	13.5	15.9	18.8	23.0	23.8	24.0	1.10	6
7	187	0.0	10.70			0.4	3.6	6.8	10.7	13.4	17.1	20.7	25.1	28.7	29.0	0.53	7
8	180	0.0	11.11			0.4	4.1	8.1	11.6	13.7	19.0	22.4	25.1	25.8	26.0	1.11	8
9	178	0.0	11.24			0.4	4.8	7.9	12.3	14.6	17.7	20.6	25.2	26.7	2,7 . 0	0.56	9
10	183	0.0	14.21		i i	0.1	4.2	7.1	11.6	14.7	18.9	20.9	21.7	24.7	25.0	0.55	10
11	188	0.0	7.45	1		0.6	4.0	7.3	10.5	12.4	16.3	18.8	24.1	28.7	29.0	0.53	11
12	181	0.0	11.60			0.3	3.3	5.6	8.7	9.7	12.4	16.8	23.1	28.7	29.0	0.55	12
13	151	0.0	7.95			0.6	3.3	5.3	8.2	9.6	11.6	13.Z	15.4	23.7	24.0	0.66	13
14	156	0.0	15.38			0.0	2.4	4.0	6.7	9.0	11.4	12.6	14.4	16.7	17.0	0.64	14
15	149	0.0	16.78				1.8	3. t	4.7	6.0	8.9	10.8	12.5	16.7	17.0	0.67	15
16	172	0.0	15.70	l		0.0	1.5	2.7	3.9	4.8	6.2	9.5	11.1	11.8	12.0	1.16	16
17	223	0.0	21.08				1.3	2.2	3.7	4.3	5.4	6.8	8.3	9.6	10.0	0.45	-17
18	286	0.0	26.92	1			0.9	1.8	3.0	3.9	4.6	5.2	6.0	8.6	9.0	0.35	18
19	304	0.0	28.62	1			0.7	1.5	2.7	3.4	4.0	4.9	5.7	11.5	12.0	0.33	19
20	304	0.0	34.54				0.5	1.1	1.9	2.6	3.4	3.9	4.7	7.5	8.0	0.33	20
21	312	0.0	38.46		1		0.3	1.0	1.9	2.4	3.1	3.8	4.9	11.5	12.0	0.32	21
22	317	0.0	39.12				0.3	0.9	1.8	2,3	3.0	3.9	4.7	6.5	7.0	0.32	22
23	323	0.0	38.08	l			0.4	1.0	1.8	2.3	2.9	3.7	. 4.7	6.7	7.0	0.62	23
24	318	0.0	39.31				0.3	0.9	1.7	2.1	2.7	*3.3	3.9	4.8	5.0	0.94	24
25	294	0.0	39.12	1			0.4	1.1	1.8	2.3	2.9	3.5	3.9	5.6	6.0	0.34	25
26	298	0.0	28.52				0.6	1.3	2.1	2.7	3.4	3.9	5. Z	5.8	6.0	1.34	26
27	290	0.0	31'. 03				0.6	1.4	2.4	3.0	4.0	4.9	6.1	7.8	8.0	0.69	27
L	1	1	1	1	1	1		<u>.l</u>	1 1	<u> </u>	1	<u></u>			1	<u> </u>	

			TAB	LE VI-1	l DIST	TURIA.	NOI	RTHERL	Y WIND I	DISTRIB	UTION						
STAT	ON:			SANTA	MONIC	A, CAL	IFORNIA						T		aug:		
REFE	RENCE I	PERIOD:		OCTO	BER									M ATMA	>NIGA, €	MULTO	INIA
STAT	ON ELE	VATION	!	125 fee	et or 38	1 meter	a MSI							(остове	R	
STAT	ON COO	PDINAT	ES:	34.01	deg N. i	18.27 d	pg \γ					<u> </u>					
PERIC	D OF O	SERVA'	TION:	Long I	Seach C	alifornii Californ	Janua da Apri	ry 1, 19 1 LE, 19	56-April 56-Dece	17, 1956 nber 31,	1760	·					
DATA	SOURCE	::	22		al Weath		rda Cent	e r					NO.	OF OBS	FOR E	ACH LE	VEL
				Ashevi	Ile, No:	th Carol									620		
חם אינ	ARED B	7:		March	all Space	Flight	nd Space Center	Aeroball	istics Di	vision					UNITS		
,				Aeropi Febru	hysics as ary 23,	nd Astro 1962	physics 1	Tranch.	Hunts II	ie, Alaba	ıma			111	eters/se	cond	
Alt.	No. of N'ly	Min. Speed.	Pct. Freq.				CUMULA	TIVE P	ERCENT	AGE FIS	warene	<u>'</u>		-	Max. Speed	Pct. Freq	Alt.
km.	Winds			0.135	2. 2k	15.9	50.0	6£. n	64. I	90.0	95.0	97. 72	99 0	99.165			km
*fc	263	0.0	38.78				0.3	0.9	1.7	2.1	3.2	4.0	6.3	10.6	11.0	0.38	•fc
1	291	0.0	27.49				1.0	2.3	4.4	5.4	7.6	9.8	13.3	19.6	20.0	0.34	1
2	320	0.0	18.12				1.6	3.2	5.6	7.1	9.3	11.5	12.7	15.5	16.0	0.31	Z
3	363	0.0	14.33		0.1 2.7 4.6 7.4 9.4 11.7 14.4 15.7 0.7 3.6 5.8 9.3 11.1 14.3 17.1 18.3									18.5	19.0	0.28	3
4	380	0.0	9.21											24.4	25.0	0.26	4
'5	365	0.0	7.40			1.0	4.9	7.5	11.4	14.7	17.9	21.8	23.7	30.5	31.0	0, 27	5
6	361	0.0	6.09			1.7	5.6	9.0	13.9	18.3	21.8	25.9	31.3	48.5	49.0	0.28	6
7	367	0.0	7.90			1.1	6.5	9.7	16.1	20.5	25.7	28.4	30.3	46.5	47.0	0.27	7
8	353	0.0	6.23			1.7	7.2	11.2	18.3	24.1	28.3	34.9	39.4	48.5	49.0	0.28	8
9	349	0.0	4.87			2.0	7.7	12.0	20.6	25.6	32.2	40.0	47.2	51.5	52.0	0.29	9
10	347 -	0.0	2.59	ľ		2.0	8.1	13.5	23.1	27.8	35,4	40.6	44.5	56.5	57.0	0.29	10
11	340	0.0	4.71			2.0	8.2	14.3	23.3	26.5	35.0	42.2	48.6	52.5	53.0	0.29	11
12	319	0.0	4.39			1.6	8.3	13.6	20.4	27,2	33.3	38.3	43.8	49.5	50.0	0.31	12
13	296	0.0	6. OB			1.4	7, 2	11.4	19.2	22.4	30.1	35.4	37.0	40.6	41.0	0.34	13
14	.289	0.0	6.57			1.0	5.6	9.2	15.B	18.5	21.8	28.4	32.5	39.6	40.0	0.35	14
15	279	0.0	11.47			0.3	5.2	8.1	12.9	15.2	18.0	21.3	25.2	29.6	30.0	0.36	15
16	288	0.0	12.15			0.3	3.8	6.3	9.4	12.0	14.6	16.4	19.5	22.6	23.0	0.35	16
17	299	0.0	13.71			0.1	2.8	4.9	6.9	8.7	10.6	11.7	14.0	15.5	16.0	0.33	.17
18	306	0.0	13.07			0.1	2.5	4.0	5.2	6.1	7.4	8.5	9.4	12.7	13.0	0.65	18
19	349	0.0	15.19			0.0	1.5	2.8	4.6	5.4	6.2	7.5	9.5	15.5	16. D	0.29	19
20	366	0.0	19.67			İ	1.3	2.4	3.8	4.7	6.1	7.2	7.7	11.5	12.0	0.27	20
21	370	0.0	20.54			1	1.3	2.2	3.6	4.5	6.1	7.8	9.1	11.5	12.0	0.27	21
22	359	0.0	22.84				1.1	2.1	3.5	4.3	5.4	6.6	7.4	13.5	14.0	0.28	22
23	348	0.0	25.29				0.9	1.8	3.1	3.8	4.9	5.8	7.2	10.5	11.0	0.29	23
24	339	0.0	26.55				0.9	1.9	3.4	4,2	5.3	6.7	8.6	12.5	13.0	0.29	24
25	311	0.0	26.69			İ	0.7	1.6	3.0	3.9	5.3	6.1	6.9	8.8	9.0	0.96	25
26	321	0.0	27.10				0.8	1.6	2.6	3.2	4.0	4.48	5.6	8.5	9.0	0.31	26
27	311	0.0	23.47				0.9	1.8	3.1	3.9	4.8	5.6	6.4	9.5	10.0	0.32	27

			TAB	LE VI-J	Z DIST	RIBUTI	ON OF N	ORTHER	LY WIN	DS			NOI	RTHERL	Y WIND	DISTRIB	UTION
STATI	ON:		•	SANT	MONIC	A, CAL	FORNIA				- 1,		T				
	RENCE I	·		NOVE	MBER								S	ANTA M	ONICA, (CALIFOI	RNIA
STATI	ON ELE	VATION	•	125 fe	et or 3f	1 meter	∎ MŠI,						L	N	OVEMBE	R	
STATE	ON COO	PDINAT	F.S:	34.01	deg N. 1	18.27 d	g W				4.1						
PERIC	D OF O	SERVA	TION:	Long 1	Beach C Monica.	aliforni Californ	Janua in Apri	ry 1, 19 1 18, 19	56-April 56-Decei	17, 1956 nber 21,	1960						
DATA	SOURCE	3:	• .				rde Cent	67			-		NO.	OF OBS	, FOR E	ACH LE	AET .
				Ashev	Weather ille, Nor	th Caro					·		_		. 600		
PREP.	ARED BY	()		March	all Space	Flight	nd Space Center, physics i	Aeroball	istics Di	vision					UNITS	:	
				Febru	ZY 23.	962							4_	m	otore/se		
Alt. (MSL)	No, of N'ly	Min. Speed.	Pct. Freq.	-	-		CUMULA	1				1			Max. Speed	Pet. Freq.	Alt. (MSL)
km √efo	Winds 353	0.0	26, 35	0. }35	2.28	15.9	50.0	68.0	.84.1 2.5	90.0 3.1	95.0 4.2	97. 72 6, 9	99.0 8.8	99.865	12.0	0.28	km efc
	343	0.0	[1.1	3.4	4.7	5.8	7.2	10.5	12.7	13.8	14.0		
2	383	0.0	23.95 15.93		·		1.9	3.7	6.0	7.5	9.8	12.2	15.3	18.4	19.0	0.87	1 2
3	412	0.0	9,95	ŀ		Ö . B	4.0	6.4	9,0	10.7	13.4	17.3	19.9	26.4	27.0	0.24	,
4	426	0.0	9.39	,		0.6	5.2	7.9	11.3	13.7	16, 2	18.5	21.2	25.4	26.0	0.23	,
•	432	0.0	7.64			0.9	6.0	3.9	13. 3	15,5	19.4	24.0	28.6	32.4	33.0	0.23	5
6	414	0.0	5.80			1.5	7.3	10.5	14.8	18.9	21.6	26.2	28.6	60.4	61.0	0.24	
7	392	0.0	4, 85			1.7	8.1	12.2	17.3	21,3	26.2	31.0	36.0	50.4	51.0	0.26	,
	377	0.0	3.45			2, 3	9.4	14.2	19.1	24.6	28.6	33.7	41.6	58.4	59.0	0.27	
9	378	0.0	4.76			2.5	10.3	15.0	21.5	26.7	33,0	39.3	49.2	56.4	57.0	0.26	,
10	372	0.0	3.23			3.0	11.2	16.4	24.6	29.2	34.8	39.7	48, 2	53.4	54.0	0.27	10
11	368	g. o	2.99			2.9	11.4	17.0	25.7	31.1	37.0	39.6	44.1	46.5	47.0	0.27	11
12	364	0.0	5.22			2,4	11.1	15.6	23,2	28.7	35.6	39.9	41.8	46.5	47.0	0.27	12
13	356	0.0	\$.06			1.8	9.6	13.9	20.5	27.3	31.5	37.8	40. Z	46.5	47.0	0. 28	13
14	358	0.0	5.87			1,4	7.2	11.3	18.3	23.3	29.3	31.4	37,4	41.5	42.0	0.28	14
15	363	0.0	5.21			1.5	6.6	9.7	14.7	17.0	20.7	23.7	27.6	34.5	39. 0	0.27	15
16	385	0.0	6. 75			0.9	5.2	8.1	11.8	14.7	17,3	20.6	22, 1	26.4	27.0	0.26	16
17	411	0.0.	7, 30			0.8	3.9	5.8	9.4	12.0	14.6	16.5	18,4	23.4	24.0	0.24	17
18	424	0.0	9.43			0.5	3.5	5.2	7.5	9,4	11.9	13.6	15.3	16.8	17,0	0.71	18
19	427	0.0	9.84			0.4	2.9	4.2	6. 2	7.3	8.4	10.0	11,3	13.4	14.0	0.23	19
20	412	0.0	9. 22	-		0.3	2.4	3. 8	5.4	6,3	8.0	9.5	10.4	12.4	13.0	0.24	20
21	398	0.0	12.56			0.1	1.8	2.9	4,8	5.4	6.4	7.4	8.7	14.4	15.0	0. 25	21
22	387	0,0	15.25			0.0	1.7	2.9	4.5	5, 1	6.3	7.6	9. Q	13.4	14.0	0.26	22
23	375	0.0	15.47		`	0.0	1.6	2.7	4. Q	5.0	6, 3	7.6	9. 1	10.8	11.0	0.80	23
24	376	6.0	16.76				1.6	2. В	4.4	3,3	6,3	6.9	8.7	11.4	12.0	0.27	24
25 -	372	0.0	14.70		`	0.0	1.7	3.0	4.7	5.7	6,8	8.4	9.6	11.4	12.0	0.27	25
26	389	0.Q	12.85			0.1	2.0	3.3	4.9	5.9	7.3	8.7	10,0	11.4	12.0	0.26	26
27	373	0.0	10.99			0.2	2.5	4.1	5.7	6.7	8,1	9.3	9.9	12.4	13.0	0.27	27

			TAB	LE VI-1	DIST	RIBUTI	on of N	ORTHER	LY WIN	ėd			NOI	THERL	Y WIND	DISTRIB	UTION
STATI	ON:			SANT	MONIC	A, CAL	IFORNIA	· · · · · · · · · · · · · · · · · · ·		1 2 2		-	1				
REFE	RENCE F	ERIOD.		DECE	MBER						<u>-</u>		S/	ANTA MO	ONICA, (CALIFO	RNIA
STATI	ON ELE	VATION:		125 fe	et or 3P	l meter	∎ MSL							DE	CEMBE	R	
STATI	ON COOL	PDINATI	ES:	34.01	deg N. I	18.27 d	eg W										
																· 	
PERIC	D OF OE	SERVA?	rion:				ia Apri										
DATA	SOURCE	:			al Weath		rde Cent	er		A *			NO.	OF OBS	FOR E.	ACH LE	VEL
				Ashev	ille, Nor	th Caro		A 1-1-1-1							620		
TREP.	ARED BY	;		Marsh	all Space	Flight	nd Space Center, physics i	Aeroball	istics Di		. ina				UNITS		
	`				ary 23,	1962					COUENC			m	eters/se	Pet.	Alt
Alt. (MSL)	No. of N'ly Winds	Min. Speed.	Pet. Freq.	0.135	2. 28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.165	Speed	Freq	(MSI
km efc	413	0.0	23.24				1.1	1.7	2.6	3.4	5.2	6.8	7,8	14.7	15.0	0.48	síc
1	372	0.0	22. 31				1.2	2.5	5.4	6.9	8.3	11.5	13.2	17.4	18.0	0.27	1
2	398	0.0	18.59				2,2	3.8	6.6	8.2	11.0	16.9	22.0	26.4	27.0	0.25	2
3	410	0.0	8.05		0.6 3.8 6.1 10.5 13.8 17.7 20.2 2										28.0	0.24	3
4	416	0.0	7.93		0.9 5.5 8.5 12.7 15.8 21.0 24.3 2										47.0	0.24	4
5	395	0.0	7.34		1.2 6.3 9.9 14.7 17.5 22.8 27.4										56.0	0.25	5
6	373	0.0	4.83			1.7	7.6	11.7	17.5	19.9	26.1	37.2	56.2	63.4	64.0	0.27	6
7	376	0.0	5.32			2.2	8.7	13.2	19.4	24.5	31.0	45.1	53.2	75.4	76.0	0.27	7
В	383	0.0	3.92			1.8	9.1	15.1	23.1	28.8	35.9	49.2	53.5	78.4	79.0	0. 26	8
9	389	0.0	3.86			2.6	10.1	16.5	24.7	28.8	36.8	46.5	55.1	72.4	73.0	0.26	9
10	401	0.0	2.99			2.5	10.8	17,4	26.6	29.7	38.9	45.8	51.9	56.4	57.0	0.25	10
11	394	0.0	2,54			2.7	11.3	17.4	26.2	30.2	34,8	45.5	51.4	53.4	54.0	0.25	11
12	371	0.0	4, 85			2.4	10.6	15.7	22.0	25.5	30.8	33.3	37.1	40.4	41.0	0.27	12
13	369	0.0	4.88			2.1	8.5	12.4	18.2	21.1	25.8	29.5	33,3	38.7	39.0	0.54	13
14	364	0.0	3, 57			1.8	7.5	10.7	14.5	18.5	21,6	27.5	29.8	34.5	35.0	0.27	14
15	367	0.0	3.00			2.2	6.3	9.4	12.8	15.1	17.9	22.6	25.6	31.5	32.0	0.27	15
16	379	0.0	5,54			1.4	5.8	8.7	11.8	13.2	16.7	19.4	21.6	25.7	26.0	0.53	16
17	394	0.0	5.58			1.0	4.5	6.7	9.4	11.3	12,6	14.0	18.0	22.4	23.0	0.25	17
1,8	405	0.0	6.42			0.8	4.2	6.0	8.0	9.5 8,2	9.7	12.9	13.9	17.4	18.0	0.25	18
19	440	0.0	8.86 10.74			0.5	3. 2 2. 5	4.9	7. i 5. 9	7,1	8,8	11.6 10.2	11.7	14.8 14.7	15.0 15.0	0.68	19 20
20	475	0.0	12.55			0.2	2.3	3.6	5.6	6.7	8.2	9.3	10.7	13.3	14.0	0.03	21
21	486 509	0.0	10.22			0.2	2.3 2.3	3.6	5,5	6.7	8.0	8.9	10.6	14.3	15.0	0.21	22
23	504	0.0	9.33			0.4	2.3	3.9	5.6	6.4	7.7	9.2	10.3	13.3	14.0	0.20	23
24	511	0.0	12.13			0.2	2.7	4.2	5.8	6.8	8.4	9.7	10.5	13.3	14.0	0.20	24
25	494	0.0	11, 94			0.2	2.7	4.5	6.1	7.2	8.7	10.2	11.3	13.6	14.0	0.40	25
26	507	0.0	9, 47			0.5	3.1	4.7	6.9	8.1	10,1	11.5	12,5	14.3	15.0	0.20	26
	۱ ا		l			0.7	1		'''								1

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

TABLE VII

Page

Distribution of Southerly Winds

(Component from the south semiplane)

Unit: meters per second

Table VII-1	
Table VII-2	January101
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Table VII-6	
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Table VII-8	July107
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Table VII-10)
Table VII-11	October
Table VII-12	2
Table VII-13	3

	-	-	TABI	E VII-1	DIST	RIBUTIO	ON OF SC	OUTHER	LY WINE	s	-		so	UTHERL	Y WIND	DISTRIB	UTION
STATI	ON:			SANT	A MONIC	CA, CAL	IFORNIA						T				
REFE	RENCE I	ERIOD:		ANNU	AL								s.	ANTA MO	JNICA, C	LALIFO	KNIV
STAŢI	ON ELE	VATION	:	125 fe	et or 38.	1 meter	• MSI.						L		ANNUAL		
STATI	ON COO	RDINAT	RS:	34.01	deg N. I	18.27 d	eg W						_				
PERIC	D OF OF	SERVA	TION:						56-April 56-Decei								
		·					rde Cent						INO	OF OBS	FORF	ACUIE	VEL
DATA	5OUR CE	•		U.S	Weather Hille, Nor	Bureau		• *					1.0.	0. 0.00	7308	22	
PREP	ARED BY	7 :		Nation	al Asron	autice a	nd Space	Admini	tration istics Di	vision					UNITS	:	
				Aerop	hysics at ary 23	nd Astro	physics	Branch,	Huntsvill	e, Alaba	ma			ın	eters/se	cond	
Alt.	No. of	Min.	Pet.			,	CUVIULA	TIVE P	ERCENT	AGE ERI	QUENC	Y			\\ax. Speed	Pct. Freq.	Alt.
MSL) kın	S'ly Winds	Speed.	Freq.	0.135	2.2k	15.9	50.0	68.0	84.1	90.0	95.0	97. 72	99.0	99.165			kın
•fc	4479	0.0	43, 47				0.2	0.9	1.9	2.4	2.9	3.6	4.2	6.7	15.0	0,02	sfc
1	3663	0.0	36.17				0.4	1.2	2.3	2.9	4.4	6,4	8.9	14. 2	18.0	0.03	1
2	3610	0,0	21.69				1,5	2.8	4.8	6.0	7.7	9.9	11.8	18.1	23.0	0.06	Z
3	3665	0.0	14.65			0.0	Z. 8	4.6	7.3	8.8	11.2	14,0	15.8	23.0	27,0	0.03	3
4	3669	0,0	11.61			0.4	3.6	5.8	8.9	10.9	13.9	17.0	19.7	29.0	33.0	0.03	1
5	3775	0.0	11.39			0.4	3.9	6.4	9.9	12.5	16.2	19.6	22.6	27.9	39.0	0.03	5
6	3789	0.0	10.19			0.6	4,4	7, 2	11.2	13.7	18.5	22. 2	25.3	32, 9	37.0	0.03	6
7	3825	0.0	9,62			0.8	5.0	8.1	12.5	15.6	20,7	25.7	29.5	40.8	51.0	0.03	7
8	3887	0.0	8. 41			1.0	5.7	9.2	14.5	18.4	23.4	28.7	32.5	43.5	55.0	0.03	8
9	3934	0.0	8.08			1.1	6.7	10.5	16.6	20.5	25.9	31,1	36.1	44.9	54.0	0.03	9
10	4000	0.0	7.57			1.2	7.5	11.9	18.1	21.9	27.3	31.8	37.0	52.6	64.0	0.02	10
11	4026	0.0	7.95			1.6	8.5	13.0	19.7	.23.1	. Z8. Z	32.6	36.6	47.5	57.0	0.02	11
12	4162	0,.0	7.23			1.5	8.3	13.0	19.1	23.1	27.2	31.6	36. 1	45, 4	57.0	0.02	12
13	4282	0.0	7. 45			1.5	7.9	12.1	17.9	21.0	25.2	28.5	32.5	40,2	49.0	0.02	13
14	4381	0.0	8,17			1.2	6.7	10.3	15.5	16.3	21.7	24.8	27.9	37.0	40.0	0.07	14
15	4424	0.0	9.45			0.8	5.3	8. 2	12. 2	14.8	. 18.0	21.1	23.9	31.5	36.0	0.02	15
16	4324	0.0	10.68			0.6	4.1	6,4	9.4	11.3	13.9	16.4	19.1	24.1	30.0	0.02	16
17	4114	0.0	14.49			0.1	2.9	4.7	6.9	8,5	10,5	12.4	14.7	21,4	31.0	0.02	.17
18	3857	0.0	19.50			e e	1.8	3. 2	5.1	6.4	7.9	9.6	12,1	17.9	32.0	0.03	18
19	3534	0.0	24,65		,		1.2	2, 3	3.8	4.8	6.1	7.6	9.3	17.6	30.0	0.03	19
20	3330	0.0	29.76				0.8	1.7	3.0	3.8	5.2		8.3	13,6	17.0	0.03	20
21	3245	0.0	34, 45				0,5	1.3	2.5	3.2	4.4	5. 8	7.2	12.2	14,0	0.06	21
22	3130	0,0	37.09	i			0.4	1.2	2.4	3.2	4.4	5.8	7.5	11.9	14.0	0,03	22
23	3118	.0.0	37.84				0.4	1.2	2. 4	3.2	4.7		8.3	13,2	18.0	0.03	23
24	3080	0,0	38,02				0.4	1.2	2.5	3.5	5.3	7.5	9.5	12.5	16.0	0,03	24
25	3201	0.0	37.14	ľ			0.5	1.3	2.6	3.6	5.1	7.4	9.7	12.8	15.0	0.03	25
26	3155	0.0	34,64	l			0.6	1.5	3.0	4.0	5.8	7.9	10.1	13.5	17.0	0.03	26
27	3185	0.0	33, 19				0.7	1.8	3,4	4.6	6.7	9.5	11.7	16.5	20.0	0.03	27

			TABL	E VII-2	DIST	RIBUTIO	n of so	UTHERI	Y WIND	5			sot	JTHERL'	Y WIND I	DISTRIB	JTION
STATI	ON-			SANT	MONIC.	A, CAL	FORNIA							ANTA MO	ONICA 6	TAL IFOR	INIA
	RENCE I			JANUA			·							ANTA OF			
STATI	ON ELEV	ATION:		125 fe	et or 3F	l meter	s MS1.								JANU.	AR Y	
STATI	ON COOL	DINATI	ES:	34.01	deg N. I	18. 27 de	eg W										
PERIC	D OF OF	SERVA	rion:	Long I	Beach C	allfornia Californ	Janua:	ry 1, 195 1 18, 195	6-April 6-Decem	17, 1956 iber 31,	1960			_ 10	· · · · · · · · · · · · · · · · · · ·		
DATA	SOURCE			Nation	al Weath	er Reco	rds Cente	er					NO.	OF OBS.	FOR E	ACH LEV	EL
DATA.	30011111	•		U. S.	Weather	Bureau									620		
משמין	ARED BY	· ·		Marsh	all Space	Flight	nd Space Center,	Aeroball:	istics Di	lsion					UNITS	: .	
				Aerop	hysics ar ary 23, 1	nl Astro 1962	physics !	Branch,	iluntsvill	e, Alaba				m	eters/se		
Alt. (MSL)	No. of S'ly	Min. Speed.	Pct. Freq.		Γ		CUMULA	Γ							Max. Speed	Pct. Freq.	Alt. (NESL)
km	Winds			0.135	2.2H	15.9	50.0	68.0	84.1	90.0	95.0 2.5	97. 72 3, 8	99.0 4.8	99 165	9.0	0, 42	- kin afc
вfc	240	0.0	61.67					0.3	1.2 4.0	1.7 5.4	7.5	9.4	11.9	17.5	18.0	0.32	1
1	308	0.0	28.90				0.8	1.8	6.0	7.2	9.7	12.1	14.1	20,6	21.0	0.35	2
2	286	0.0	18.53			0,3	3.7	5.5	8.5	10.1	13.1	16.2	17.6	25.6	26.0	0, 37	3
3	272	0.0	11.76			0.5	4.8	7.5	11.1	12.9	17.1	19.4	24.2	30.6	31.0	0.37	4
5	276	0.0	9, 42			0.8	6.0	8.9	13,0	16.1	19.7	23, 1	24.2	27.6	28.0	0.36	5
6	275	0.0	8,00			1,3	6.7	9.9	14, 4	18.3	21.7	24.7	29.2	33.6	34.0	0.36	6
7	292	0.0	8. 22			1.3	6.8	10.5	15.5	20.4	26,2	29.4	31.5	33.6	34.0	0.34	7
8	305	0.0	6.23	ļ.		1.8	7.6	11.7	17.9	25.1	29.9	32, 5	33.9	37.5	38.0	0.33	8
9	315	0.0	5. 40			2.4	8.7	13.6	20.9	26.7	32.7	36.4	37.9	44.5	45.0	0.32	9
10	324	0.0	6.17			2, 1	8.1	13.9	23.3	27. Z	30.3	33.6	37.7	40.5	41.0	0,31	10
11	311	0.0	6.43			2.3	10.2	16.2	24.1	27. 1	31.2	33, 4	36.6	38.5	39.0	0.32	11
12	307	0.0	7.49			1.8	9.8	15.3	22.0	24.5	26.8	30.0	33,4	36.5	37.0	0.33	12
13	306	0.0	10.46			1,1	9, 2	13.8	18.8	21,1	25,2	27. 2	28,3	32.5	33.0	0.33	13
14	305	0.0	8.85			1,3	7.8	11.4	17.3	19.2	22.1	24.6	25.9	28. 7	29.0	0.66	14
15	305	0.0	10.82			0.9	6.3	9.0	14.2	17.4	19.4	21.2	23.9	25.7	26.0	0,66	15
16	299	0.0	11.37			0.9	4.7.	7, 4	11.5	13.5	15.Z	18.5	22.0	29.5	30.0	0.33	16
17	280	0.0	8, 21			0.7	3.6	5.8	9. 2	10.5	12,0	13.8	16.1	30.6	31.0	0.36	17
18	251	0.0	19.52				1.9	3.9	6.8	8.2	9.4	1i. i	13.4	31.6	32,0	0.40	18
19	207	0.0	18, 36]			1.6	3.1	5.5	6.4	7,5	8.8	9.9	29.7	30.0	0.48	19
20	182	0.0	28,57	l			1.1	2.5	4, 2	4.9	6,5	7.7	8.5	15.7	16.0	0.55	20
21	173	0.0	31,21				0.8	1.8	3, 4	4.5	5.5	6.5	8.2	9.7	10.0	0.58	21
22	166	0.0	36, 14				0.5	1.5	2.7	3.3	4.2	4.8	5.6	6.7	7.0 8.0	1,28	23
23	156	0.0	33.33	1			0.6	1.5	2.7	3.4	4.4	5, 2	7.2	7.8	8.0	1,28	24
24	153	0.0	40,52	1	1.		0.4	1.3	2.7	3.9	5,3	6,5 7,5	7.2	8.9	9.0	1 71	25
25	175	0.0	26, 29	ı	'		0.8	1.8	3.3	3.9	5.0	8.6	9.5	1	11.0	0.54	26
26	184	0.0	28.26	1			1.0	2.7	4. 3 5. 8	5, 5 7, 2	8.9	10.6	11. ₁ l ₁	12.7	13.0	0,53	27
27	187	0.0	24.60	<u></u>		<u> </u>	₽. Z	3.9	9, 6		0.7					1	

02													_				
			TABL	E VII-3	DIST	RIBUTIO	ON OF S	OUTHER	LY WIND	5			50	UTHERL	Y WIND I	DISTRIB	истои
STATI	ON:		,	SANT	MONIC	A, CAL	IFORNIA	· · · · · · · · · · · · · · · · · · ·						ANTA MO	ONICA (TALFOR	NIA
REFE	RENCE I	ERIOD:		FEBR	UARY									ANIA W	MICA, C	JALIFOR	CNIX
STAT	ON ELE	VATION:	•	125 fe	et or 3P	l meter	• MSI.						L		FEBR	UARY	
STATI	ON COO	PDINATI	ES:	34.01	deg N. I	IF. 27 de	eg W										
PERIC	D OF O	SERVA	TION:						56-April 56-Decen							,	
DATA	SOURCE	:			al Weath	er Reco	rds Cent	ег		· 			NO.	OF OBS	FOR E	ACH LE	VEL
				Ashev	ille. Nor	th Carol							_		568		
יים חיו.	ARED BY	r :		Marsh	all Space	e l'light	Center,	Adminis Aeroball	itration istics Di Hunts::[]]	vision					UNITS		
					ary 23	1962								ın	eters/se	_	
Alt. (MSL)	No. of Sily	Min. Spead.	Pct. Freq.			T	T	Γ	ROENTA	T		97.72	99.0	79 165	Speed.	Pet. Freq.	(VISI)
kın sfc	Winds	0.0	57.09	0.135	2.2H	15.9	50.0	6R.0	1.4	90.0	95.0 2,7	3.6	4.3	6.6	7, 0	0.34	sfc km
1	264	0.0	38, 26			i	0,5	1.6	3.6	5,6	8.6	11.4	14,1	16.6	17.0	0.38	1
2	211	0.0	19.91				2.7	5.0	8.0	10.2	12.0	13.3	19.8	22.8	23.0	0.95	2
3	207	0.0	13.04		0.2 3.9 6.3 9.4 13.8 15.8 18.2										27, 0	0.48	3
4	221	0.0	10.86		0.2 3.9 6.3 9.4 13.8 15.8 18.2 0.6 5.0 8.0 12.9 15.3 18.7 20.9										25.0	1.36	4
5	231	0.0	9.52			1.1	5,6	8.5	14.5	16.7	19.6	21.9	23.8	26.6	27, 0	0.43	5
6	239	0.0	9.62			1.0	6.0	9.9	14.7	17.7	20.5	23.5	25.8	36.6	37.0	0.42	6
7	243	0.0	9.88			1, 2	7.3	11.6	16.9	18.5	22.7	27,7	29.1	29.8	30.0	1,23	7
8	254	0.0	7, 87			1.8	7.6	11.3	20.1	21,9	25.6	30.7	31.8	38.6	39.0	0.39	8
9	256	0.0	8. 20			1.6	8.8	12.0	21.4	24.0	26.7	35.0	36.7	37. 8	38.0	0.78	9
10	257	0.0	6.23			1.9	9. 2	14, 1	21.4	24.4	29.7	33.5	36.4	45.6	46.0	0.39	10
11	254	0.0	7.09			2. 9	9.8	13.9	21.0	23.9	29.6	32.6	36.4	38.8	39.0	0.79	11
12	263	0.0	B. 37			2, 0	8.8	13.5	19.3	21.6	25.4	29. 5	32.3	36.8	37.0	0.76	12
13	263	0.0	6.84			2.0	8. 2	12.4	17.3	20.5	22.8	25.0	26.3	33.6	34.0	0.38	13
14 '	268	0.0	8. 21			1.9	7, 1	10.5	14. 2	16.5	19.8	21.9	24.6	29.8	30, O _.	0.75	14
15	269	0.0	10; 41			1.1	5.9	8.4	12.6	14.3	16.7	19.4	24.3	31.6	32.0	0.37	15
16	267	0.0	10,11			0,8	4, 8	6.8	10.0	12, 1	14.0	14.8	17.4	18.6	19.0	0.37	16
17	264	0.0	13,64			0, 2	3.5	5, 7	8.4	9.7	11.9	13.6	15.3	17.6	18.0	0.38	17
18	258	0.0	19.77				2.4	4.3	6.2	7.6	. 9. 8	12.4	13.4	25.6	26.0	0.39	18
19	229	0.0	19.65				2. D	3.6	5.0	6.5	8.1	9.9	11.3	18.6	1910	0.44	19
20	206	D. 0	23,30				1.5	2.8	5. 2	6.1	7.1	8.6	10.9	12.7	13.0	0.49	20
21	203	0.0	19. 21				1, 4	2.7	4.7	5.7	6.9	9.1	10.4	12.7	13.0	0.49	21
22	196	0.0	24, 49				1, Z	2.6	4.9	6.6	8.7	10,7	12.0	13.7	14.0	0.51	22
23	196	0.0	27.04				1.2	2.7	5.9	7.9	10.0	12.3	13.0	13.8	14.0	1.02	23
24	197	0.0	31.98				1,0	3.4	6.6	9.0	10.8	12.3	13.0	15.7	16.0	0.51	24
25	182	0.0	24, 73				1.7	4.5	8.6	10.3	12,1	12.7	13.0	13.8	14,0	1,10	25
26	181	0.0	20.44				2. 2	5.8	9.2	10.3	11.8	13.6	15.5	16.7	17.0	0.55	26
27	182	0.0	17.58				3.4	7.4	10,6	12.3	14.3	16.4	18.1	19.7	20.0	0.55	27

			TABL	E VII- 4	DIST	RIBUTIC	ON OF 50	UTHERI	AMIM Y.	s			sou	THERLY	WIND D	ISTRIBU	JTION
STATI	ON:			SANTA	MONIC	A, CAL	FORNIA						S.	NTA MC	NICA C	ALIFOR	NIA
	RENCE F			MARC										MITA W			
STATE	ON ELEV	ATION:		125 fe	t or 3P	l meter	■ MSI.						L		MARC	:H	
STATI	ON COO	DINATE	:S:	34.01	deg N. 1	18.27 de	ag ₩										
PERIC	OD OF OR	SERVAT	TION:	Long I	Seach C	alifornia Californ	Janua: la Apri	ry 1, 195 1 18, 195	6-April 6-Decen	17, 1956 nber 31,	1960						
DATA	SOURCE	:	·		al Weath Weather		r,de Cente) r					NO.	OF OBS.	FOR EA	CH LEV	EL
UREP	ARED BY	:		Nation	all Space	autics a	ina nd Space Center, / physics I	Aeroball:	istica Di	vision	ma				UNITS:		
	,			Febru	ry 21,	1962						,	با	m	oters/sec	Pct.	Alt.
Alt. (MSL)	No. of 5'ly	Min. Speed.	Pct. Freq.				CUMULA			90.0	95.0	97.72	99.0	99.865	Max. Speed	Freq.	(\tSL
km efc	Winds 341	0.0	50, 73	0.135	2. 2H	15.9	50.0	68.0 1.0	84.1 1.9	2.5	3,1	3.7	3.9	5.5	6.0	0. 29	ofc
1	262	0.0	35. 88				0.6	1.5	2.9	4.1	4.9	6.3	8.6	14.6	15,0	0.38	,
2	223	0,0	23, 77				1.7	2.9	4. 8	5,8	7.3	8.9	10.3	12.6	13.0	0.45	Z
3	217	0.0	20.74				2.5	4.3	7.8	9.2	10,5	11.6	15.8	18.7	19.0	0.46	3
4	205	0,0	12, 20			0.2	2.8	4.8	7.7	10.3	13.7	, 16.3	16.9	28.7	29.0	0.49	4
5	225	0.0	15.56			0.0	3.3	5.7	9.5	12.7	15.5	18.2	19.7	26.6	27.0	0.44	5
6	230	0.0	14.35			0,1	3.6	6,5	10.8	12.7	17.7	21.5	23.3	29.6	30.0	0,43	6
7	244	0.0	15.98				3.9	7.0	11.3	14.9	19.9	24. 4	30.5	32.6	33.0	0, 41	7
8	245	0.0	14, 29			0,1	5.0	7.7	12,7	15.5	21.8	30.4	32.5	33.6	34.0	0, 41	8
9	248	0.0	15.73			0.0	5.1	8.6	14.2	18.6	25.6	30,7	33.5	35.6	36.0	0, 40	9
10	282	0,0	19.86				5.3	8.4	13.7	16.7	22.2	29.5	34.5	36.6	37.0	0.35	10
11	293	0.0	19.80				5, 3	8.8	15, 4	18.7	23.1	28, 3	32.0	46.6	47.0	0,34	11
12 -	310	0.0	16.77				5.1	8.5	13,3	16.2	21.2	24.9	30.9	41.5	42.0	0.32	12
13	318	0.0	13.52			0.3	4.6	7.4	10,8	13.4	17.1	21.2	25.2	33.5	34.0	0.31	13
14	333	0,0	19. 22				3.9	6.7	10.0	11.8	13.9	17.8	20.3	24.5	25.0	0, 30	14
15	329	0.0	23, 40				3.3	5.3	7, 8	9.7	11.7	15.4	18.8	22.5	23,0	0.30	15
16	310	0.0	21.94				2.8	4. 7	7.3	8.6	9,8	11.9	15.9	17.5	18,0	0.32	16
17	301	0.0	27.57				1,6	3, 4	5, 5	6.4	8.3	10.2	10.9	12.5	13.0	0.33	. 17
18	267	0.0	27.72				1.4	2.6	4. 2	5.3	7.1	7.9	8.8	13.6	14.0	0.37	18
19	233	0.0	28.76				1.0	2.1	3.3	4.2	5.7	6.9	7.8	8.8	9.0	0.86	19
20	224	0.0	25.00				1.2	2, 1	3.4	3,8	4.8	5.9	6.9	7.8	8,0	0.89	20
21	216	0.0	27.78				0.9	1.8	3. Z	4.0	4.8	6.0	6.5	6.9	7.0	2. 31	21
22	208	0.0	28, 85				0.7	1.7	3.6	4.5	5.7	6.5	6.9	8.7	9,0	0.48	22
23	207	0.0	34, 30				0.6	1.9	4.0	5,0	6.7	8.0	8.9	11.7	12.0	0,48	23
24	235	0.0	32.77				0.7	2.0	3,9	5.1	6.3	7.9	8.8	9.8	10.0	0.85	24
25	278	0.0	32, 73				0.7	1.9	3, 0	4,1	5.4	6.6	8.6	11.6	12.0	0.36	25
26	241	0.0	31,54				0.9	2.0	3.5	4.6	5.7	6,6	8.2	10.6	11.0	0,41	26
	240	0.0	32.50	I	1	1	0.9	2.3	3.8	4.9	6.2	8.2	10.3	12.6	13.0	0.42	27

NOTE: (1) When the percent frequency of minimum speed exceeded 2, 2F and/or 0, 135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

	,		TABI	LE YII-5	DIST	rributi	ON OF 5	OUTHER	LY WIN	os			sc	UTHERL	y wind	DISTRIB	UTION			
STAT	ION;			SANT	A MONIC															
	RENCE	PERIOD:	:	APRI								-	S	SANTA M	ONICA,	CALIFO	RNIA			
	ION ELE				et or 3P	1 meter	• MSL						1		APR	11.				
																-				
3171	ION COO	RDINAT	F:5:	34.01	deg N,	118.27 d	eg W									•				
PERIO	DO OF O	BSERVA	TION:	f.ong	Beach (Californi	a Janua	ry 1, 19	56-April	17, 195	6									
				Santa	Monica,	Californ	nia Apr	11 1B, 19	56-Dece	nber 31	. 1960	-								
DATA	SOURCE	S:			val Weatl Weather			ter		,			NO.	OF OBS	. FOR E	ACH LE	VEL			
PREP	ARED B	r:			ille, No			Admini	tration						600					
	-			Marsi Aerop	uall Spac hysics a:	e Flight nd Astro	Center,	Aeroball Branch,	istics Di	vision le, Alab	a ma			***	UNITS					
Alt.	No. of	Min.	¹² ct.	rebru	ary 23,		CUMULA	TIVE PI	ERCENT	AGE FR	EQUENC	Y			Max.	Pet.	Alt.			
(MSL) km	S'ly Winds	Spend.	Freq.	0.115	2.2k	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99 165	Speed	Freq.	(MSI.			
•fc	416	0,0	43, 75				0.3	1.3	2.3	2,8	3,5	4.5	5.9	7,7	8.0	0, 48	sfc			
ı	262	0.0	29. 39				0.7	1.6	3.0	4,2	5.9	9.0	9.8	14.6	15.0	0.38	1			
2	250	0.0	24,00				1.5	3.4	6.0	7.7	9.4	11.1	13.5	18.6	19.0	0.40	2			
3	229	0.0	14.85		0.1 3.1 5.3 8.9 11.0 12.1 14.6 0.3 3.9 6.6 10.9 13.5 15.5 17.9										18,0	0.87	3			
4	226	.0.0	13. 27											23.6	24.0	0.44	4			
5	224	0.0	12, 50			0.3	4. 2	7. 2	14.0	16.1	19.9	22. 2	19.7 23.6 24.0 0.44 24.3 25.6 26.0 0.45							
6	227	0.0	10,57			0.5	4. 5	8.3	16.1	19.3	24, 1	25. 9	31,7	32.8	33.0	0.88	6			
7	232	0.0	14. 22			0.2	4. 6	8, 7	17.7	21.6	26.4	30.7	33.6	42.6	43.0	0,43	7			
8	230	0.0	9. 13			0.6	5, 3	10.1	21.4	23.8	30.5	38.3	39.8	44.6	45.0	0.43	8			
9	246	0.0	12, 60			0.3	5, 1	9.0	20,5	24.8	30,9	38.3	46,5	53,6	54.0	0.41	9			
10	242	0.0	12. 81			0, 3	6.0	10.3	21.4	26.7	29.9	42. 4	61.5	63.6	64.0	0. 41	10			
11	248	0.0	12, 10			0.4	6.1	10.4	20.5	27.0	34,3	39, 3	44.5	55,6	56.0	0.40	11			
	269	0.0	15, 99				4.8	8.7	16.1	23.7	29.8	36.8	46,3	56.6	57.0	0.37	12			
13	286 318	0,0	10, 84 16, 04			0.6	4.6	8. D 6. 9	14.3	18.7	23.7	31,7	37.5	42.8	43.0	0.70	13			
15	325	0.0	14, 46			0,1	3,6	5.8	10, 5 9, 0	13.4	19.7 16.8	24. 2 22. 5	30.4 26.8	35.5 30.7	36,0 31,0	0.31	14			
16	316	0.0	18.04			٠.٠	2.9	5. 2	7.6	9.6	12.6	15.8	20.8	23.5	24.0	0.62	15 16			
17	313	0.0	19.49		Į		2.7	4, 3	6.6	7,8	10.5	13.9	18.8	23.5	22.0	0.32	. 17			
18	310	0.0	19,68				1.9	3.8	5. 9	7.5	9.5	11.4	14,4	17.7	18.0	0.65	18			
19	305	0.0	23.61				1.6	3, 1	4.7	5.9	7.6	10.2	13.9	1,5.8	16.0	0.98	19			
20	288	0.0	24, 65				1.3	2. 2	3.8	4, B	7.5	11,2	13.3	14.6	15.0	0.35	20			
21	282	0.0	32, 27	1	1		0.7	1.8	3, 2	4.3	5.8	9. 2	11.5	12.8	13.0	0, 71	21			
22	284	0.0	30, 99	Ì	-		0.8	1,6	2.7	3.6	4,8	9.7	11.5	12.8	13.0	0,70	22			
23	282	0.0	33, 33	İ	ĺ		0.6	1.4	2.8	4.0	5,7	7.7	12.0	14.6	15.0	0.35	23			
24	253	0.0	29, 25	ļ	į		0.9	2.0	3.6	4.8	7.0	9.0	9.8	10.8	11.0	0.79	24			
25	256	0.0	27. 34	İ	ļ	į	1.0	2.3	3.6	4.5	6.7	9.0	10.Z	11.6	12.0	0.39	25			
26	288	0.0	23, 61				1.1	2. 3	4.4	5.7	7.1	9, 2	10.7	11.8	12.0	0.69	26			
27	275	0.0	24. 36		1	- 1	1.5	3, 1	5, 0	6.0	7.3	8.9	10.2	16.6	17.0	0.36	27			

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

	:		TABI	LE VII-6	DIST	RIBUTI	ON OF S	OUTHER	LY WING)s			so	UTHERL	Y WIND	DISTRIB	10
STATI	ON:						IFORNIA						_				- 10.1
	RENCE I	ERIOD.		MAY		,							s	ANTA M	ONICA.	CALIFO	RNIA
	ON ELE				et or 3f	1 meter	• \f\$1.			-,					MAY		
													جال_				
STATI	ON COO	RDINATI	ES:	34.01	deg N, I	118.27 d	eg W							-			
PERIC	D OF O	SERVA	TION:							17, 1956 nber 31.							
DATA	SOURCE	:			al Weath		rds Cent	e 7					NO.	OF OBS	FOR E	ACH LE	VEL
				Ashev	ille, Nor	th Caro		43.1.							620		
PREP	ARED BY	(<u>:</u>		Marsh	all Spaci	e Flight	nd Space Center,	Aeroball	istica Di	vision is, Alaba	ma				UNITS		
	, ,				ату 23,	1962					·····				eters/se	_	T
Alt. (MSL)	No. of S'ly	Min. Speed.	Pct. Freq.	0.135	2.2k	15.9	50.0	68.0		AGE FRE		97.72	00.0	00.145	Max. Speed	Pct. Fr e q.	Alt. (MSI:
kın sfc	Winds 471	0.0	33, 12	V. 133	2.45	13.7	0,6	1.4	84. 1 2, 3	90.0	95.0 3,2	3,8	99.0 4.4	99 865	9.0	0. 21	km efc
1	311	0.0	35, 69				0,5	1,2	2, 3	2.7	3.6	4.7	6.8	7.8	8.0	0.96	1
2	294	0.0	15.99)		1,8	3.4	5.7	6.6	7.8	8.8	9.7	10.8	11.0	0.68	2
3	318	0.0	15, 41			0.0	3.5	6.0	8.9	10.5	14,0	15.3	16.4	19.5	20.0	0.31	3
4	323	0.0	13.00			0, 2	4. 2	7.6	12,4	14.7	17.1	18.6	20.3	22, 5	23,0	0, 31	4
5	330	0.0	10.91			0.4	5.0	8. 4	14.5	17.4	20,1	22.6	24.3	31.5	32.0	0.30	5
6	326	0.0	8. 59			0.8	5.9	9.5	16.6	20,0	23, 1	26. 2	29.7	33, 5	34.0	0.31	6
7	326	0.0	7.06			1.4	7.1	10.9	18.8	21,6	26.1	29.4	33.7	42.7	43.0	0.61	,
8	331	0.0	7, 85			1.3	7.0	12.1	21.0	23.2	26. 1	29. 4	37.3	54.5	55, 0	0.30	8
9	342	0.0	8. 19			1.1	7.9	13.9	20. 1	24.5	29.4	33.6	38.5	52.5	53.0	0, 29	9
10	339	0.0	6, 49			1,2	8.5	13,6	21.0	24.5	30.0	37, 4	44.6	53.5	54,0	0. 29	10
11	342	0.0	8,19			1.5	9.0	14, 2	21.4	26.2	32.4	38. Z	44.5	52.5	53.0	0.29	11
12	348	0.0	5, 4 6			1.4	8.3	13.7	21.9	25,5	30,3	35.0	41,7	42.8	43.0	0.86	12
13	358	0.0	9, 22			1.6	7.9	12.6	20, 3	24.2	27,6	30, 4	35.2	40.5	41.0	0, 28	13
14	368	0.0	6.79			1.2	6.3	10.6	17. 2	21.2	22, 9	25, 4	28.1	38.5	39.0	0, 27	14
15	383	0.0	9. 40			0.9	5.3	8,9	13.8	15.9	18.7	21.4	22.7	32. 4	33.0	0, 26	15
16	407	0.0	9.58			0.6	4. 4	7. 2	10.3	11.7	13.8	17.3	19.6	23.4	24.0	0, 25	16
17	425	0.0	16. 47				3. 2	5.1	7.8	9.5	10.8	12.8	14.8	21, 4	22,0	0.24	17
18	406	0.0	17. 49				2, 2	3,9	6.0	7.4	8.7	9.8	12,4	18.4	19.0	0, 25	18
19	389	0.0	24, 16				1, 4	2.6	4, 1	5.0	6.0	7.5	9.1	13, 4	14,0	0. 26	19
20	340	0.0	21.,47				1.0	1.8	3.0	3.9	4.9	5.9	8.6	10,5	11.0	0. 29	20
21	353	0.0	32, 58			,	0.5	1.2	2.0	2.7	3.4	3.9	5.4	7.7	8.0	0.57	21
22	324	0.0	40.12				0.4	1.2	2. 5	3, 1	3.9	5.0	5.6	7.5	8,0	0.31	22
23	302	0.0	37.42				0,4	1.1	2, 2	2.8	3.7	5.0	5.9	11,5	12.0	0,33	23
24	283	0.0	36.75				0.4	0.9	2. 1	2.9	3.7	5. 1	6.3	10.6	11.0	0.35	24
25	282	0.0	39, 72				0.3	1.0	2.0	2.8	3.8	4.6	5.3	6.6	7.0	0.35	25
26	265	0.0	30, 57				0.7	1.5	2.6	3,5	4.8	5.7	6.4	7.6	8.0	0.38	26
27	250	0.0	31.60				0.6	1.6	2.9	3.8	5.1	5. 9	8,2	9.6	10.0	0, 40	27

TABLE VII-7 DISTRIBUTION OF SOUTHERLY WINDS												so	SOUTHERLY WIND DISTRIBUTION						
STATION: SANTA MONICA, CALIFORNIA													П	·					
REFERENCE PERIOD: JUNE												S	SANTA MONICA, CALIFORNIA						
STATION ELEVATION: 125 feet or 38 1 meters MSL											L	JUNE							
STATI	ON COO	RDINAT	ES:	34.01	deg N.	18.27 de	eg \V			<u> </u>		 ·							
PERIO	D OF O	SERVA	TION:	Long Santa	Beach C	California Californ	Janua ia Apri	ry 1, 19 1 18, 19	66-April 66-Decer	17, 1956 nber 31	1960								
DATA SOURCE: National Weather Records Co									Center						NO. OF OBS. FOR EACH LEVEL				
Asheville, North Carolina														600					
PREPARED BY: National Aeronautics and Space Administration Marshall Space Flight Center, Aeroballistics Division Aerophysics and Astrophysics Branch, Huntaville, Alabama													UNITS:						
				Febru	February 23, 1962 CUMULATIVE PERCENTAGE FREQUENCY									maters/second					
Alt. (MSL)	No. of S'ly	Min. Speed.	Pct. Freq.				50.0	68.0	84.1	90.0	95.0	97. 72	99.0	99.665	Max. Speed	Pct. Freq.	Alt. (\IS).		
kin_	Winds 468	0.0	36.32	0.135	2,2k	15.9	0.5	1, 2	2, 1	2,6	3.2	3, 8	4.3	6.3	7.0	0, 21	km		
efc l	275	0.0	42.55	i			0.3	1.0	1,9	2.5	3.5	4.4	4.9	5.8	6.0	0.73	afc 1		
z	336	0.0	26, 49				0.9	2. 2	3,6	4.3	5.6	6.9	7,7	12.5	13.0	0.73	2		
3	376	0.0	15, 16			0,0	2.5	4, 2	6.4	8.0	10.0	11,4	12.6	15.7	16.0	0.53	3		
4	383	0.0	11, 23			0,5	3.7	6.0	9.0	10.9	12.6	14.7	16.5	17.8	18.0	0.78			
5	388	0.0	12, 11			0.4	4, 3	6.7	10.3	12.0	14.6	17.3	20.5	29.4	30.0	0, 26	5		
6	380	0.0	10.00			0,6	4, 8	7.5	10.6	12.7	16.0	20.7	23.0	27, 4	28.0	0, 26	6		
7	364	0.0	7.14			1.4	6. Z	8.7	12.1	14.2	17.3	21.2	26.3	30.5	31.0	0, 27	7		
8	369	0.0	6, 78			1.5	7.0	10.5	14.4	16.6	20.0	24. 1	26.6	37.5	38.0	0, 27	8		
9	369	0,0	6.23			2.0	8.7	12,6	17.6	19.5	23.0	25.5	27.6	39.5	40.0	0, 27	,		
10	377	0.0	5, 31			2, 4	10.5	13.9	18.9	21.0	24,4	28. 7	29.8	28. 4	39.0	0.27	10		
11	385	0.0	6, 23			2.8	11.5	15.9	20.9	23.5	26.7	30.6	33.0	33.8	34. 0	1.04	11		
12	399	- 0.0	3, 51			3, 1	11.8	16,4	23,6	26,6	29.0	31.6	37.0	40.4	41.0	0.25	12		
13	427	0.0	4, 45	i		2.6	10.7	16.6	22. 2	25.7	28.6	31,1,	34.9	37.7	38.0	0.47	13		
14	446	0.0	5. 83			1.9	9.9	15, 1	20, 8	23.2	25.5	26.9	29.5	39.3	40,0	0, 22	14		
15	466	0.0	8.37		_	1.3	7.7	11.9	16.4	18.0	20.1	22. 2	23.6	27.6	28.0	0. 43	15		
16	471	0.0	9,34			0.8	5.6	8.5	11.6	13, 1	15.3	18, 3	20.6	24.3	25.0	0.21	16		
17	451	0.0	11.31	:		0.5	4.0	5.7	8.3	9.9	11.7	13. 9	16.4	25, 3	26.0	0.22	17		
18	437	0.0	14. 67			0.0	2. 2	3.5	5. 7	7,0	8.2	9.8	11.6	15.4	16.0	0.23	18		
19	421	0.0	22. 57				-1,1	2. 1	3, 5	4.4	5.8	6.9	8. Z	11.4	12.0	0, 24	19		
20	385	0.0	31.95				0,6	1.4	2.6	3.3	4, 1	5,7	6.6	9.4	10,0	0.26	20		
21	364	0.0	39. 29				0,3	0.8	1.9	2.5	3.4	4, 4	7.1	8.7	9.0	0.55	21		
22	332	0.0	43.37				0.2	0.8	1,7	2, 2	3,2	4, 1	6.6	7.8	8.0	0.90	22		
23	326	0.0	43. 67				0, 2	0.7	1, 8	2.3	2.9	3.9	4.9	6.5	7.6	0.31	23		
24	326	0.0	45.09				0,1	0.8	1.7	2,3	2.9	4.7	9. Z	11.5	12,0	0.31	24		
25	316	0.0	41.77				0.3	1.0	1.7	2.1	3, 1	3, 8	4.9	8.5	9.0	0.32	25		
26	317	0.0	43. 22				0.2	0,8	3.7	2, 1	3. 1	3, 8	5.2	6.5	7.0	0.32	26		
27	334	0.0	41.32	i			0.3	1.0	1.9	2.5	3, 3	3.9	4.8	5.8	6.0	0.90	27		

			TABL	E VII-\$	DIST	RIBUTIO	ON OF SC	UTHERI	Y WIND	ų.			501	THERL	WIND I	DISTRIBU	JTION
STATE	ON:			SANTA	MONIC	A, CAL	FORNIA				+						
REFE	RENCE I	PERIOD:		JULY		45.4							S	ANTA MO	ONICA, C	CALIFOR	NIA
STĄTI	ON ELE	VATION:	ي .	1,25 (0	et or 3P	[meter	• MSI.								JUL	γ .	-
ITATE	ON COO	PDINATI	F.S.	34.01	deg N. 1	18.27 d	g W										
PERIC	dor or	APP VA	TION	Long	leach C	aliforni	Tanua.	PV 1. 195	6-Anril	17, 1956							
, much				Santa	Monica,	Californ	ia Apri	1 18, 195	é-Decer	nbes 31.	1960						
DATA	SOURCE	1					rde Cent	• 7					NO.	OF OBS.	JOK E	CH LEV	'EL
		٠.	٠,	Ashev	Weather lie, Nor	th Caro							<u> </u>		620		
PREP	ARED BY	r:		March	all Space	Flight	nd Space Center,	Aaroball	istics Di	vision		. 4			UNITS:		
	• .			Aerop Febru	hydics ar kry 23.	962				le, Alaba				m	eters/se	_	_
Alt. (MSU)	No. of S'ly	Min. Speed.	Pet.				CUMULA	TIVE PE	RCENT	AGE FRE	QUENC	} 			Max. Speed	Pct. Freq.	Alt. (MSI
£ _{in}	Winds		,,,,	0.135	2,2H	15.9	50.0	68.0	84.1	90.0	95.0	97. 72	99.0	99. £65	- 1		kın
əfc	513	0.0	35,62				0.5	1.2	1.9	2,4	2.8	3.4	3.9	4, 8	5.0	0.78	sfc
1	387	0.0	36, 18				0.4	1,1	1.8	2.2	2.9	3.4	4. 7	6.4	7, 6	9, 26	1
2	407	0.0	19. 41				1.6	2, 8	4. 5	5.4	6.5	7.7	8.7	10.4	1).0	0. 25	,
3	488	0.0	14, 14			0, 1	2,6	4. 4	7, 2	8.4	10.5	13.9	13.0	17, 3	18,0	0, 20	,
4	517	6.0	8.51			0.7	3.9	5.6	8.2	9.5	11.3	13.1	14.4	16.6	37.0	0.39	•
5	535	0.0	10.65			6,5	3.9	5.9	9.0	10.3	13.5	12.79	14.3	17, 2	18,0	0.19	3
6	534	0.0	8, 43			0, 8	4.3	6.6	9, 9	11.5	13.0	13.9	16.3	20,2	21.0	0, 19	٠.
7	514	0.0	7. 36			1, 2	5, 0	7.4	10.5	12.7	14.7	17.0	20.9	24, 3	25, 0	0.19	,
	521	6.0	7. 29			1.3	5. 9	8.5	11.9	14.1	17.3	20.3	23.3	29. 2	30,0	0.19	8
9	518	9.0	6.10			1,6	6.9	9.7	13.8	15.9	20.0	23.2	25.8	34.3	35.0	0.19	,
10	527	9.0	f\$,50°			2, 2	8. 2	12.0	35.7	18, 3	21.6	26.3	28.5	33,6	34,0	0, 38	10
11	529	0.0	4, 73			3.0 ,	9.6	12.9	17,7	20.0	23.7	26.9	31.8	38, 2	39. 0	0.19	11
12	551	0.0	3.35			2, 8	a6. I	13, 4	18.5	20.5	25.2	28.8	32.8	40.6	41.0	0,38	12
13	516	0.0	3, 88			2.9	10, 2	13.3	18.0	21.1	24.4	27.8	31.9	35.3	36.0	0.19	13
14	520	0.0	-5. 2 7			2, 5	8.5	11.7	15, 7	17.4	20.6	23, 1	25.9	31.2	32.0	0,19	14
15	517	0.0	1.68			2, 3	6.1	8.7	11.7	13.6	15.6	10.0	19.9	24.3	25.0	0, 19	15
16	518	8.0	4. 83			1, 1	4.0	6.0	8, 3	9.6	11.4	12.9	14.6	17.6	18.0	0.39	16
17	479	0.0	10.02			0,4	2.7	4,0	5.9	6.7	7.6	9.1	10.0	12.3	T3.0	0,21	.17
10	457	0.0	15, 54			0.0	1.7	2.7	3, 9	4.7	5.4	5. 5	6.7	9.3	10.0	0, 22	18
19	451	0.0	25, 43			'	1,0	1,9	2. 6	3.5	4.4	5.0	5.6	6.4	7, 0	0. 23	19
20	406	0.0	33.00				0.6	1.4	2, 1	2.7	3.5	4.4	5.4	7, 4	8.0	0, 25	20
21	402	0.0	34.08				0.5	1.1	1.9	2,4	3.2	4.3	5.4	5.8	7,0	0.75	21
22	406	0.0	40,64				0.3	1.0	2.0	2.6	3.3	3.8	4,4	6.4	7.0	0, 25	22
23	393	0.0	40, 46				0, 3	0.9	1,8	2.3	3.0	3, 7,	4,4	6.4	7.0	0.25	23
24	381	0.0	41, 13				0.3	0.9	1.8	2.3	3.3	3,9	5.0	6.7	7.0	0.52	24
25	384	0.0	43.75			ž.	0.2	0.8	∴1, \$	2,5	3.2	4,1	4.6	6.4	7.0	0.26	25
26	401	0.0	44, 64			ľ	0.1	0.8	2. 1	2.7	3.5	4.4	5.3	9.4	10.0	0, 25	26
27	385	0.0	37, 40				0.5	1.3	2, 4	2.9	3.9	4.0	8.1	14.7	15,0	0.52	27
						L		1		الراب الم				ل	 _		<u> </u>

NOTE: (1) When the percent frequency of minimum speed excepted 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency excepted was not determined.

			TABL	E VII-9	DIST	RIBUTIC	N OF SO	UTHERI	duim A	3			sot	THERLY	WIND I)ISTRIBU	JTION
STATI	ON:					A, CALI	FORNIA						SA	NTA MC	ONICA, C	CALIFOR	(NIA
REFEI	ENCE P	ERIOD:		AUGUS									-}-				
STATI	ON ELEV	ATION:		125 (e	t or 38	l meter	• MSL								AUGI	JST	
STATI	ON COOP	DINATE	S:	34.01	deg N, 1	18.27 de	g W										
PERIO	D OF OR	SERVAT	ION:	Long I	leach C	alifornia Californ	Janua: ia Apri	y 1, 195	6-April 6-Decen	17, 1956 aber 31,	1960						
DATA	SOURCE	1		Nation	al Weath	er Reco	rds Cente						NO.	OF OBS	. FOR E.	ACH LE	VEL
					Weather lie, Nor		ina								620		
PREP	RED BY	:		Matten	al Aaron	autice a	nd Space Center,	Adminis Aeroballi	tration	vision					UNITS	:	
				Aeropi	yelce ar	rt Astroj	physics F	ranch.	lluntsvill	a, Alaba	ma,			ın	etere/se	cond	
Alt.	No. of	Min.	Pct.				CUMULA	TIVE PE	RCENTA	CE FRE	QUENC	Y	•		Max.	Pct. Freq	Alt. (MSI
(MSL) km	S'ly .Winds	Speed.	Freq.	0.135	2.2H	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	7104	km
∎ſc	493	0,0	35, 29				0,5	1.1	1.9	2.3	2.8	3.3	4.0	5.3	6,0	0,20	sfc
1	390	0.0	37.18				0.3	0.9	1,8	2.4	2.9	3,6	4,2	5.4	6.0	0, 26	1
2	457	0.0	21,01				1.4	2, 4	3.8	4.4	5,5	6,6	7.2	11.3	12.0	0, 22	. 2
3	488	0,0	10, 45			0, 4	2, 8	4.0	5, 5	6, 3	7,7	9.1	9.8	13,3	14.0	0, 20	3
4	484	0.0	10.33			0,5	3, 5	5, 2	7, 2	8.0	9.0	10, 4	11.6	14.3	15.0	0. 21	4
5	482	0,0	11.20			0.3	3.5	5. 5	7.9	9, 3	10.5	12.1	12.8	14.7	15.0	0.62	5
6	467	0.0	13.63			0, 3	3.7	6,0	8.4	9,6	12.5	14.2	15.3	16.3	17.0	0.21	6
7	489	9.0	11.04			0.5	3. 9	6.3	8.9	10.7	12.7	15.6	18.1	21.3	22.0	0.20	7
8	485	0.0	9, 28			0.8	4.6	6,8	10.7	12,6	15,5	19.6	21.6	22.7	23,0	0.62	8
9	494	0.0	9.11			1.0	5, 6	8.7	13.6	15.9	19.5	22. 8	24.5	28.3	29.0	0,20	9
10	515	0.0	4. 27			1.5	6.9	10.7	15,8	18,7	23.4	26.3	27.4	36.3	37.0	0.19	10
11	514	0.0	5. 45			2. 3	9,1	12.5	18.2	20.4	24.3	27.8	30,9	37.3	38,0	0.19	11
12	53Q	0.0	4. 15			2, 5	10, 2	14, 1	18.8	22, 1	25.5	27. 9	30,6	39. 2	40,0	0,19	12
13	540	0.0	4.63			3.5	10, 1	13.7	18.6	20.7	24.4	26.8	28.8	33, 2	34,0	0.19	13
14	550	0.0	1.82		0.1	2. 8	8.5	11.6	15.3	17.1	20.0	22. 1	23, 1	31.2	32.0	0.18	14
15	550	0,0	4,00			1.5	6.4	8.6	11,0	12.7	15.1	16.9	18.7	23.2	24.0	0,18	15
16	540	0,0	6.35			1.2	4.4	6.2	8.3	9.5	11.0	13.0	15.6	17.2	18.0	0.19	16
17	467	0.0	13, 35			0.1	2. 3	3.9	5.7	6.5	7.8	9, 1	10.3	18.3	19,0	0, 21	.17
18	4\$2	0.0	23.01				1.2	2, 2	3.4	3.9	5,0	6.3	7.1	9.6	10,0	0.44	18
19	396	0.0	30.05				0.7	1.5	2. 4	2.9	3.8	4.7	5.6	8. 4	9.0	0, 25	19
20	4)3	0.0	39. 47				0,3	1.0	1.9	2,5	3.2	3.7	4.4	6.4	7.0	0.24	20
21	376	0.0	39.63	ŀ		1	0,3	0.9	1.9	2.4	2.9	3,8	4.6	5.7	6.0	0.53	21
22	343	0,0	37.03				0.4	1,1	2.0	2,5	3.0	3, 9	4.7	7.5	6.ρ	0.29	22
23	364	0.0	42.03				0, 3	1.1	1.9	2,5	3.3	4. 3	6.1	13.5	14.0	0, 27	23
24	355	0.0	45.92	1			0, 1	0.8	1,7	, 2.4	3.3	3.9	5.1	5.8	6.0	1.13	24
25	357	0,0	48, 46			1	0.0	0.8	1.8	2.5	3,3	3.9	4.8	5.8	6,0	0.84	25
26	350	0.0	42.00	1			0.2	0.8	2,0	3.0	4.0	4.6	4.9	6.7	7, 0	0,57	26
	1		38, 29				0,4	1,2	2.4	3, 2	4.2	4, 8	5,7	7.5	8,0	0.29	27
27	350	0.0	35, 49	1	L			L <u>.</u>		<u> </u>		<u> </u>	L	<u> </u>	<u> </u>	<u></u>	1_

NOTE: (i) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

			TABL	E All-jo	DIST	RIBUTIO	N OF SO	UTHERI	Y WIND	\$			sot	THERL	Y WIND I	DISTRIBU	JTION
STATI	ON:			SANTA	MONIC	Á, CÁL	FORNIA				,			7	·		
REFE	RENCE F	ERIOD:		SEPTE	MBER								SA	ANTA MO	NICA, C	ALIFOR	INIA
STATI	ON ELEV	MOITAV		125 fee	t or 3F	l meter	• MSL								SEPTEN	iber 	
STATI	ON COOF	DINATI	rs:	34.01	deg N. 1	18.27 de	y w								•		
PERIO	DOFOR	SERVA	rion:				Janua: ia Apri										
DATA	SOURCE				al Weath Weather		rde Cente	• 7	,`			,	NO.	OF OBS.	FOR E	ACH LEV	/EL
				Ashevi	ile, Nor	th Carol		44-1-1-							600		
LHE57	ARED BY	· ·		March	all Space	Flight	nd Space Center, , physics I	Aeroball	ofice Di	vision e. Alaba	.ma			_	UNITS:		
				Febru	ry 23, 1	962	CUMULA					,	_	m	otére/se	Pct.	Alt.
Alt. (MSL)	No. of Sily Winds	Min. Speed.	Pet. Freq.	0.135	2. 2k	15.9	50.0	68.0	84. 1	90.0	95.0	97.72	99.0	99.165	Speed	Freq	(MSL)
km sfc	429	0.0	42.89	,			0.2	0.9	1.8	2.3	2.8	3.2	3.7	4.4	5.0	0.23	ofc
1	368	0.0	34. 24				0.4	1.0	1.9	2,4	2.9	3.8	4.4	5.5	6.0	0, 27	1
2	406	0,0	17.73				1.8	3.0	4. 9	5.9	7.1	8. 2	9.4	11,4	12.0	0. 25	2
3	413	0.0	13.32			0, 2	3.3	5.3	7.6	8.7	10.8	13.6	15.2	21,4	22.0	0.24	3
.4	417	0.0	8.63			0.7	3.7	5.7	8. 4	10.1	12.7	15.8	20.8	24, 4	25 0	0, 24	4
. 5	435	0.0	10,34			0.5	3.5	5, 4	8. 1	10,1	13.9	16.0	19.6	24. 4	25.0	0, 23	5
6	418	0.0	6.94			1.2	4. 4	6.6	10.3	12.5	16.5	20.1	21.9	24. 7	25.0	0.48	6
7	413	0.0	6.54			0.9	4.7	8. 2	11.6	14.0	19.4	23.1	25.4	28. 4	29.0	0.24	7
6	420	0,0	8.57			1.0	5.7	9.4	13.8	16.0	21.3	26,0	26.9	30.4	31.0	0.24	8
9	422	0.0	4.74			1.3	6.1	10, 4	15,8	18.9	25.6	29. 1	32.6	36.4	37.0	0.24	9
10	417	0,0	7.67			1.1	6.9	11.7	17, 3	21.0	28.0	31.1	32,9	41.4	42.0	0.24	10
11	412	0.0	7.52			1.4	8.0	12,8	19.4	23.2	29, 1	32.8	35.9	42. 4	43.0	0,24	11
12	419	0.0	6, 21			1.4	8.5	13, 2	18.5	24.3	30,6	35.6	38.8	45.4	46,0	0.24	12
13	449	0.0	6.90	-		1.4	7.7	12, 8	17.6	22,1	28.1	34.9	37.5	48.3	49.0	0.22	13
14	444	0.0	7.88			1.2	6.8	11.0	16.4	20.0	24,9	29. 2	33.5	39.7	40.D	0.45	14
15	451 [°]	0.0	7.76			0.8	5.1	8.5	13.6	17.5	22.4	25, 3	28.7	34,6	35.0	0.44	15
16	428	0.0	9.58			0.6	3,7	6.2	10.3	13.4	16.8	19.0	21.7	26.7	27,0	0,47	16
17	377	0.0	12.20			0.2	2, 5	4, 3	6.8	8.4	11.0	12, 7	15.1	20.4	21.0	0,27	17
18	314	0,0	22, 29				1.2	2.5	4, 2	5.9	7.4	8.7	10.9	13,5	14.0	0.32	18
19	296	0.0	33, 45				0.7	1.7	3, 1	4.0	5,1	5, 9	7.0	9.6	10.0	0,34	19
20	296	0.0	37,50				0.4	1, 2	2. 2	2,7	3,8	5.7	7,3	8.6	9.0	0.34	20
21	288	0.0	47.57	1			0.0	0.8	1.6	2,0	2.9	3.9	5.1	7.8	8.0	0.69	21
22	283	0.0	50.53					0,6	1.4	1.9	2.6	3,8	4.7	7.6	8.0	0.35	22
23	277	0.0	51.99					0.6	1,5	1.9	2.8	3.7	4.6	6.6	7.0	0.36	23
24	282	0.0	44.68	l			0.1	0.8	1.6	2.5	3.4	4, 7	7, 1	8.8	9,0	0.71	24
25	306	0.0	42.48				0.2	0.9	1.8	2.3	2.8	3.8	4,7	7.5	8.0	0.33	25
26	302	0.0	44.70	ł			0, 2	0.9	1.7	2.2	2.9	3.6	4.2	4.8	5.0	0.65	26 27
27	310	0.0	45, 81				0.1	0,8	1.8	2.5	3,3	4, 1	4.8	6.7	7.0	0.03	

NOTE: (1) When the percent frequency of minimum speed exceeded 2.2F and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

			TABL	E VII-1	DIST	RIBUTIC	N OF SO	UTHER	LY WIND	5			SO	UTHERL	Y WIND I	DISTRIB	UTION
STATI	ON:			SANT	A MONIC	A, CAL	IFORNIA						s	ANTA MO	ONICA. (CALIFOR	RNIA
PEFE	RENCE F	ERIOD:		осто									_				
STAT	ON ELE	VATION:		125 fe	t or 36	l meter	MSI.								ОСТОВ	ER	
STATI	ON COOL	DINATI	:S:	34.01	deg N. l	18.27 de	g W										
PERIC	D OF OF	SERVA	TION:	Long 1	Seach C	alifornia	Janua	ry 1, 19	6-April	17, 1956	1060						
04.004	SOURCE						ia Apri		- 17#C#1	noer 31.		·	NO.	OF OBS	. FOR E	ACH LE	VEL
DAIA	SUUNUE	•		U. 5	Weather	Burcau				•					620		
PEP	APED BY			Nation	ile. Nor	autics a	nd Space	Adminia	tration						UNITS	:	
			1	Aerop	hysics ar	orteA h	Center, . physics I	Aerobaii Branch,	Huntevill	o, Alaba	ma			m	eters/se	cond	
	No. of	Min.	Pet.	Febru	ry 23, 1		CUMULA	TIVE P	RCENT	AGE FRE	QUENC	γ			Max.	Pct.	Alt.
Alt. MSL) km	S'ly Winds	Speed.	Freq.	0.135	2.2H	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Speed	Freq.	(MSI km
efc	357	0.0	48.74				0.0	0.7	1.6	1.9	2.6	2.9	3.7	_5; 5	6.0	0.28	øfe
1	329	0,0	37, 69				0.4	1.0	2.0	2.7	3.5	4.3	4.8	6.7	7,0	0.61	1
2	300	0.0	24. 33				1.2	2, 2	3.9	5.0	7.0	8.8	10.3	11.5	12.0	0.33	2
3	257	0.0	18. 29				2.3	3,6	5.7	7.4	9.2	12.0	12.6	14.6	15.0	0.39	3
4	240	0.0	12,50			0. Z	3.1	4.7	7.3	8.8	11.2	11,9	13.6	16.6	17.0	0.42	4
5	255	0.0	14.12			0.1	3.1	5, 3	7.8	9.1	12.4	15.7	19.4	22,6	23.0	0.39	5
6	259	0.0	10.81			0.4	3, 4	6.2	8.9	11.5	13,7	19.0	22.1	22.6	23.0	1, 16	6
7	253	0.0	10.67		-	0,6	4.3	6.5	11, 4	13.9	18.1	24.1	26.4	31,6	32.0	0,40	7
8	267	0.0	7.49			0.8	4, 3	7.2	13.1	16.0	20.8	23.9	27.6	37.6	38.0 45.0	0.37	8
9	271	0.0	6.27			0.9	5.8	8.9	15.2	17.9	25.2 26.5	30.2 31.7	31.2	41,6	42.0	0.37	10
10	273	0.0	8, 42			0.9	6,2	9.5	16.6	21.6	25.6	29.8	35.1	42, 6	43.0	0.36	11
11	28Q 301	0.0	9,64 6,98			0.9	5, 5	9,1	16.0	18.5	22.2	26.6	27.9	46.5	47.0	0,33	12
13	324	0.0	8.33			0,8	5, 3	8.7	13.4	17.3	19.7	22.5	25.3	28.5	29.0	0.31	13
14	331	0.0	9.37		l l	0.8	5.3	7,8	11.9	14.4	17.8	20.2	22.6	26.5	27, 0	0.30	14
15	341	0.0	9.97			0.7	4. Z	6.6	9.3	10.9	13.7	16, 2	18.8	20.5	21.0	0. 29	15
16	332	0.0	12.05			0.4	3.9	5.9	8,0	9.0	11.8	14.2	15.5	20;5	21.0	0.30	16
17	321	0.0	14.64			0.1	2.9	4.6	6.2	7.1	8.5	10.3	11.9	12.8	13.0	0.93	17
18	314	0,0	18.79				1.6	3.1	4.8	5.8	6.7	8, 2	9.2	9.8	10.0	1.27	18
19	271	0.0	19.19				1,4	2. 4	3,8	4.6	5.6	6.6	7.6	8.8	9.0	0.74	19
20	254	0.0	28.74				0.9	1.8	3.0	3'. 8	4.7	5,6	6.7	9.6	10,0	0.39	20
21	250	0.0	35.60				0.5	1.4	2.6	3, 3	4.3	5. 2	5.9	7.6	6.0	0.40	21
22	261	0.0	36.40	1			0,4	1.2	2.4	3.0	4.4	5.7	7.3	8, 8 8, 6	9.0 9.0	0.77	23
23	272	0.0	31.99			 	0.6	1.3	2.3	3.3	4.6	5.5 4.7	6.4 5.5	6.6	7.0	0.36	24
24	281	0.0	34.52				0.6	1,4	2, 3	2.9 3.2	3.7	5.6	6.3	7.5	B. 0	0.32	25
25	309	0.0	31.39				0.7	1.6	2.8	3.5	4.6	6.2	8.0	9.5	10,0	0, 33	26
26	299	0.0	1				0.9	1.8	3.2	3.7	4.7	5.7	7.4	8.7	9.0	0.65	27
27	309	0.0	31,72	i .	i	į	1	1	1	1	. *··	I.		1	ı		1

NOTE: (1) When the percent frequency of minimum speed exceeded 2.2F and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

-			TABL	E VII-12	DIST	RIBUTIC	ON OF SC	UTHER	LY WIND	s			sot	JTHERL	Y WIND I	DISTRIB	UTION
STATI	ON:			SANT	MONIC	A, CAL	IFORNIA							-			
REFER	RENCE F	ERIOD:		NOVE	MBER								S	ANTA M	ONICA, (CALIFO	RNIA
STATI	ON ELE	YATION:		125 fe	et or 38	l meter	• MSL						L	N	OVEMBE	R	
STATI	ON COOL	PDINATI	ES:	34.01	deg N, 1	18.27 de	g W	-			<u> </u>						
PERIO	D OF O	SERVA	rion:				Janua ia Apri								-		
DATA	SOURCE	:					rde Cent	r					NO.	OF OBS	FOR E	VCH TE.	VEL
				Ashev	Weather lle, Nor	th Carol									600		
PREPA	ARED BY	7:		Marsh	all Space	Flight	nd Space Center, . physics I	Aerobali:	istics Di	vision	ms				UNITS		
<u> </u>				Febru	ry 23, 1	962								ın	eters/se		1
Alt. (MSL)	No. of S'ly	Min. Speed.	Pet. Freq.				CUMULA						20.0	00.46	\!ax. Speed	Pct. Freq.	(\151.)
kın sfc	Winds 247	0.0	51,82	0.135	2. 2H	15.9	50.0	68.0	84.1	90.0	95.0 2.5	97. 72 3. 1	99.0	99 165	15.0	0.40	efc
1	257	0.0	40,47				0.2	0.8	1.9	2.7	3.9	7.5	8.8	11.6	12.0	0.39	1
2	217	0.0	32.72				0.9	1.9	4,5	6.3	9.1	12.0	13.9	16.7	17,0	0,46	2
3	188	0.0	20.74				1.3	2.7	7.2	9.8	13, ì	14.8	21,1	23,7	24.0	0.53	3
4	174	0.0	23,56			,	1.6	3.4	10.4	13.9	20.3	29.0	30.2	32.7	33.0	0.57	
5	168	0.0	11.90			0, 3	3, 2	5.0	13.2	17.5	22.5	27, 1	33, 3	38.7	39.0	0.60	5
6	186	0,0	13.98			0.1	3,2	5.8	13.4	20.7	25.7	29.7	33.1	34.7	35.0	0.54	6
,	208	0.0	15,38			0.0	3.2	6.5	13.5	19.5	27.6	38.1	40.9	50.7	51.0	0.48	7
8	223	0.0	12.56			0.3	4.1	7.4	14.5	22.8	30.4	34.9	43,3	45.6	46.0	0.45	8
,	222	0.0	8.56			0.7	5.0	9.7	18.7	25,4	34.2	36.9	40,7	44.7	45.0	0.45	9
10	228	0.0	9.21			0.7	4.9	11.3	20. Z	25.2	32.6	37.8	44.8	47.8	48.0	0.88	10
11	232	0.0	4.74			1.6	5.5	11.7	22.2	26.2	30.7	35.2	36.6	41.6	42.0	0.43	111
12	236	0.0	7.20			0.9	6.0	10.3	20.6	25.3	28.0	30.6	33.6	35.6	36.0	0.42	12
13	244	0.0	5.74			1.5	5.8	10.1	18.0	22,5	26.3	27.8	30.5	32.6	33.0	0.41	13
14	242	0.0	12.81			0.5	4.9	8.5	16.1	19.9	23.9	27.2	30.2	35.6	36.0	0.41	14
15	235	0.0	9.79			0.4	4.2	7.0	14.7	17.6	21.6	24.8	30.6	35.6	36.0	0.43	15
16	215	0.0	14.42			0.1	3.3	6.5	13.2	15,3	16.8	21.6	23,8	26.7	27.0	0.47	16
17	. 189	0.0	16.93				3.0	6.2	9.3	10.6	12.7	14.6	19.1	26.7	27.0	0.53	- 17
18	176	0.0	21.02				2.5	4.7	7.0	7.8	11.1	15.9	17.2	18.7	19.0	0.57	18
19	173	0.0	21.39				1.9	3.7	5.7	6.9	8.8	14.0	17.6	20.7	21.0	0.58	19
20	188	0.0	22.87				1.3	2.7	4.5	5.6	7,8	9.7	13,1	16.7	17.0	0.53	20
21	202	0.0	28.22			٠.	0.9	2. 1	3.3	4, 2	5,6	7.1	7.9	13.8	14.0	0.99	21
22	213	0.0	27.70				0.8	1.7	3.1	4,3	5.5	6.7	7.9	8.8	9.0	0.94	22
23	225	0.0	30.22				0.8	1.7	3.9	4.7	5,7	6.6	7.7	17.6	18.0	0.44	23
24	224	0.0	30.80				0.7	1.8	4.3	5,9	7.9	9.3	9.9	12.6	13.0	0.45	24
25	228	0.0	30.70				0.8	2.0	5.0	6.1	7,7	9.5	12, 2	12.8	13.0	1.32	25
26	211	0.0	22.27				1.6	2.9	5.1	6, 2	8.1	10.5	11.9	12.8	13.0	0.95	26
27	227	0.0	22.03				1.6	3.0	4.9	7.7	9.7	11.4	11.9	15.6	16.0	0.44	27

NOTE: (1) When the percent frequency of minimum speed exceeded 2.2F and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

			TABI	E VII-13	DIST	RIBUTIO	ON OF SC	UTHER	LY WIND	s			sot	JTHERL'	A MIND I	DISTRIB	UTION
STATE	ŎN:			SANT	MONIC	A, CAL	IFORNIA						1		,. <u>í</u> .		
REFEI	RENCE I	ERIOD:		DECE	MBER								S	ANTA MO	ONICA, C	CALIFOI	A1NF
STATE	ON ELE	VATION:		125 fe	et or 38	l meter	• MSL							DI	есемве	R	
STATI	ON COO	RDINATI	ES:	34.01	deg N. 1	18.27 de	g W										
,,,,,,																····	
PERIO	D OF OR	SERVA	rion:	i.ong i Santa	Beach C Monica,	alifornis Californ	Janus ia Apri	ry 1, 19! 1 18, 19!	64-April 66-Decen	17, 1956 nber 31,	1960						
DATA	SOURCE	:			al Weath Weather		rds Cente	e r					NO.	OF OBS	, FOR E.	ACH ĹE	VEL
55.55	A D ED BY	,		Ashev	ille, Nor	th Carol	ina nd Space	Adminie	tration		,				620 UNITS		
PREPA	ARED BY			Marsh Aerop	all Space hysics ar	r Flight ad Astro	Centér. physics I	Aeroball	istics Di	vision e, Alaba	ma		ł	ın	eters/se		
Alt.	No. of	Min.	Pct.	Febru	ату 23,		CUMULA	TIVE PE	RCENTA	AGE FRI	QUENC	Y			Max.	Pct.	Λlι
(MSL) kin	S'ly Winds	Speed.	Freq	0.135	2, 2k	15.9	50.0	68.0	84. J	90.0	95.0	97. 72	99.0	99 865	Speed	Freq.	{\\(\\$].} km
sfc	207	0.0	50.24					0.7	1.5	1.8	2.3	2,8	3.9	4.8	5.0	0.97	*íc
1	248	0.0	38.31				0.4	1.0	2.2	2.8	5.5	9.0	9.8	13.6	14.0	0.40	1
2	222	0.0	21.17				1.4	2.6	4.8	6.3	8.6	11.4	13.3	15.7	16.0	0.45	2
3	210	0.0	14.29			0.0	2.2	4.0	6.5	8. 6	12.2	14.7	15.9	19.8	20.0	0.95	3
4	204	0.0	13.73			0.1	3.2	4.9	8.7	10.5	12.9	17.1	20.9	26.7	27.0	0.49	4
5	225	0.0	10.22			0.3	3.4	6.3	9.4	12.2	15.6	18.9	21.3	24.6	25.0	0.44	5
6	247	0.0	12.15			0.3	3.9	6.8	10.7	17.8	25.2	30.6	31.0	0.40	6		
7	244	0.0	8.20			0.7	5.0	7.8	12.6	15.1	19.9	25.4	27.7	38.6	39.0	0.41	7
8	237	0.0	5.91			0.9	5.8	9.6	15.5	20.0	25.7	30.2	33.6	37.6	38.0	0.42	8
9	231	0.0	11.26			0.6	7.2	11.6	18.5	21.8	29.2	36.2	37.6	43.6	44.0	0.43	9
10	219	0.0	5.02			1.4	8.3	13.4	20.7	26.0	33.0	37.0	42.8	52.7	53.0	0.46	10
11	226	0.0	8.85			1.7	8.9	12.9	21.3	25.3	31.6	38.9	45.8	56.6	57.0	0, 44	11
12	249	0.0	9.64			0,,7	7.6	12.0	18.7	23,7	31.7	36.6	43.7	45.8	46.0	0.80	12
13	251	0.0	10.36			0.7	6.5	10.7	16.2	20,1	24.1	29.2	31.4	36.6	37.0	0.40	13
14	256	0.0	7.42			1.0	5.3	9.3	13.6	17.4	19.9	23.0	25,4	29.6	30.0	0.40	14
15	253	0.0	9.88			0.6	5.1 4.2	8.3 6.6	9.6	13.7	16.1	14.9	20.7	26.6	27.0	0.83	15
16	241	0.0	9.54			0.1	3.5	5.2	7.6	9.0	13,4	12.9	16.7	23.6	24.0	0.44	. 17
18	215	0.0	18.60				Z. 1	3.9	5.5	6.7	7.9	11,0	13.8	15.7	16.0	0.47	18
19	180	0.0	27, 22				1.2	2.5	4.1	4.9	7.0	7.9	9,6	16.7	17.0	0.56	19
20	145	0.0	28.28	l			0.8	1.7	3.6	4.4	5.5	6.4	6.8	7.8	8.0	0.69	20
21	134	0.0	33.58				0.7	1.6	2.6	3.2	4.3	4.8	6.6	7.8	8.0	0.75	21
22	111	0.0	35.14				0.4	1.0	2.8	3, 5	4. Z	4.8	5.4	5.9	6.0	1.80	22
23	116	0.0	35.34				0.4	0.9	2.3	3, 2	4,4	5.1	5.6	5.9	6.0	2.59	23
24	109	0.0	26.61			-	0.7	1.4.	2.4	3. 2	4.6	7.5	8.9	9.8	10.0	0.92	24
25	126	0.0	42.06				0.3	1.2	2.4	3.0	3,9	5.5	6.7	14.8	15.0	0.79	25
26	113	0.0	36.28			į	0.5	1.3	2. 3	3, 1	3.9	5.4	6.4	6.9	7.0	1. 77	26
27	134	0.0	35.07				0.6	1.4	2.4	3,0	4.1	5.3	5,8	7.8	8.0	0.75	27
	<u> </u>	<u> </u>		L	<u> </u>	l .	<u></u>	<u> </u>	L	<u> </u>		ــــــــــــــــــــــــــــــــــــــ			L	<u> </u>	<u> </u>

NOTE: (1) When the percent frequency of minimum speed exceeded 2.28 and/or 0.135 cumulative percentage frequency, the speed associated with the cumulative percentage frequency exceeded was not determined.

TABLE VIII

D	is'	tri	bu	tion	of	V	ec1	tor	W	ind	She	ars	

Unit: inverse second (sec ⁻¹) per 1000 meter layer of altitude
Table VIII-1 Annual 114
Table VIII-2 January 115
Table VIII-3 February 116
Table VIII-4
Table VIII-5 April 118
Table VIII-6
Table VIII-7 June 120
Table VIII-8July
Table VIII-9 August 122
Table VIII-10 September
Table VIII-11
Table VIII-12
Table VIII-13 December

STATION SATISMUS S				TABLE	VIII-1	DISTRIBITE	ON OF VECT	ים מאוש אם:	HEARS					R WIND	
STATION CORDINATES 1.01 day N. 118-72 day 1.00 day N. 118-72 day 1.00 day N. 118-72 day 1.00 day N. 118-72 day 1.00 day N. 118-72 day 1.00 day N. 118-72 day 1.00 day N. 118-72 day 1.00 day N. 118-72 day 1.00 day N. 118-72 day 1.00 day N. 118-72 day 1.00 day N. 118-72 day 1.00 day N. 118-72 day N.	ļ												DIZ	TRIBUTI	ON .
STATION FLEVATION: 125 feet or 18.1 meiers MSL		CE PERIOD	D:		VICA, CALII	FORNIA							SANTA MOI	NICA, CA	LIFORNIA
PRINCIPLY Company Co		-			38. I meters	MSL								ANNUAL	
PERIOD OF OBSERVATION: Long Reach, California Jensey 1. 1962 April 17. 1956 Santa Mondae, California Jensey 1. 1966 Lipsconter 13. 1966				14 03 3 1	1 110 37 4	w			·				•		
DATA SOURCE: State Monife	STATION	JOK DINA!	1 2-3:	24. VI TER N	, 116.27 de	· "									
PREPARED PREPARED	PERIOD O	F OBSERVA	TION:)						
National Arrowalitic and Space Administration Internal Space Administration Internal Space Interna	DATA SOU	RCE:		U. S. Westi	ser Bureau								NO. OF OR		ACH LEVEL
No. No. No.	PREPARE	D BY:		National Ae Marshall Sp Aerophysics	ronautice an ace Flight C and Astrop	d Space Adm Center, Aerol hysics Branc	inistration ballistics Di- h, Huntsvill	vision e. Alabama					Invers	UNITS:	(sec - 1)
March 1,15 2,28 1,5 50.0 68.0 64.1 90.0 97.0 97.63 97.65 1.0						MULATIVE	PERCENTA	GE FREQUE	NCY				Maximum	Pet.	Alt. Layer
	(MSL)	0.135	2.28	15.9	1 · · · · · · · · · · · · · · · · · · ·	T	T	r	т	97.72	99.0	99.165	Shear		(MSL)
2.0-3.0			. 0003		.0041	.0052	. 0070	. 0080	†	.0113	. 0132	.0178	. 0239	0.01	sfc- 1.0
3.0-4.0 3.0-4.0 3.0-4.0 3.0-4.0 3.0-4.0 3.0-4.0 3.0-4.0 3.0-4.0 3.0-4.0 3.0-4.0 3.0-4.0 3.0-5.0 3.0066 3.0017 3.0049 3.0066 3.0077 3.0099 3.0119 3.0148 3.0244 3.0566 3.017 3.0-4.0 3.0-6.0 3.0-6.0 3.0-6.0 3.0-6.0 3.0-7.0 3.0-6.0 3.0-7.0 3.0-6.0 3.0-7.0 3.0-8.0 3.0-9.0 3.0-8.0 3.0-9.0 3.0-8.0 3.0-9.	1.0- 2.0		. 0008	. 0021	.0045	. 0059	.0079	. 0090	. 0105	.0123	. 0143	.0198	. 0219	0,01	1.Q- Z.O
4.0-5.0	2.0- 3.0		. 0008	. 0020	.0043	. 0057	. 0075	. 0087	.0103	. 0127	. 0150	. 0224	,0308	0.01	2.0- 3.0
5.0-8.0 .0005 .0017 .0036 .0049 .0066 .0077 .0094 .0119 .0150 .0259 .0357 0.01 5.0-8.0 6.0-7.0 6.0-7.0 .0004 .0017 .0035 .0049 .0067 .0080 .0100 .0127 .0161 .0261 .0388 .0.01 6.0-7.0 7.0-8.0 .0004 .0017 .0038 .0051 .0070 .0082 .0102 .0131 .0164 .0250 .0371 .0.01 7.0-8.0 8.0-9.0 .0005 .0017 .0039 .0052 .0073 .0089 .0111 .0138 .0161 .0254 .0352 .0.01 .0.011 .0.006 .0020 .0044 .0061 .0087 .0114 .0132 .0157 .0196 .0239 .0388 0.01 .9-010.0 .0.008 .0.021 .0044 .0061 .0087 .0104 .0136 .0157 .0196 .0239 .0380 .0.01 11.0-12.0 .0.008 .0021 <td>3.0- 4.0</td> <td></td> <td>. 0006</td> <td>. 0019</td> <td>. 0039</td> <td>. 0051</td> <td>. 0070</td> <td>. 0082</td> <td>. 0099</td> <td>. 0121</td> <td>. 0150</td> <td>. 0236</td> <td>.0342</td> <td>0.01</td> <td>3.0- 4.0</td>	3.0- 4.0		. 0006	. 0019	. 0039	. 0051	. 0070	. 0082	. 0099	. 0121	. 0150	. 0236	.0342	0.01	3.0- 4.0
6,0-7,0 .0004 .0017 .0035 .0049 .0067 .0080 .0100 .0127 .0161 .0241 .0388 0.01 6.0-7.0 7.0-8.0 .0004 .0017 .0038 .0051 .0070 .0082 .0102 .0131 .0168 .0250 .0371 0.01 7.0-8.0 8.0-9.0 .0005 .0017 .0039 .0052 .0073 .0089 .0111 .0138 .0161 .0254 .0352 0.01 8.0-9.0 9.0-10.0 .0006 .0019 .0041 .0059 .0081 .0088 .0123 .0157 .0196 .0293 .0358 0.01 10.0-11.0 10.0-11.0 .0006 .0020 .0044 .0061 .0087 .0104 .0132 .0162 .0201 .0299 .0380 0.01 10.0-11.0 11.0-12.0 .0006 .0020 .0046 .0063 .0091 .0108 .0157 .0199 .0271 .0397 .011 11.0-12.0	4.0- 5.0		. 0006	.0018	.0037	.0049	.0066	. 0079	. 0095	. 0119	.0148	. 0224	. 0356	0.01	4.0- 5.0
7.0-8.0 .0004 .0017 .0038 .0051 .0070 .0082 .0102 .0131 .0168 .0250 .0371 0.01 7.0-8.0 8.0-9.0 .0005 .0017 .0039 .0052 .0073 .0089 .0111 .0138 .0161 .0254 .0352 0.01 8.0-9.0 9.0-10.0 .0006 .0019 .0041 .0059 .0081 .0098 .0123 .0157 .0196 .0293 .0358 0.01 9.0-10.0 10.0-11.0 .0006 .0020 .0044 .0061 .0087 .0104 .0132 .0162 .0201 .0299 .0380 0.01 10.0-11.0 11.0-12.0 .0006 .0020 .0046 .0063 .0091 .0108 .0136 .0167 .0199 .0271 .0397 .0.01 11.0-12.0 12.0-13.0 .0008 .0021 .0047 .0066 .0091 .0112 .0139 .0168 .0282 .0387 0.01 12.0-13.0 <td>I</td> <td></td> <td>1</td> <td>Ī</td> <td>l</td> <td></td> <td>1</td> <td>ł</td> <td>1</td> <td></td> <td>į</td> <td>1</td> <td></td> <td></td> <td>ļ</td>	I		1	Ī	l		1	ł	1		į	1			ļ
8.0- 9.0			1	l l		1	l			1		1			
9,0-10.0			l	1		į.					i	1			
10.0-11.0			1			I	ŀ		1	l	l	!			
11.0-12.0			1	ł	ļ.		l		l	1	1	İ			1
12.0-13.0				1		1	l	l	1		1				1 .
13.0-14.0				1	l	İ	1	I			1		1		
14.0-15.0 .0009 .0021 .0047 .0063 .0089 .0101 .0123 .0148 .0173 .0256 .0380 0.01 14.0-15.0 15.0-16.0 .0008 .0020 .0044 .0060 .0080 .0095 .0114 .0136 .0157 .0220 .0305 0.01 15.0-16.0 16.0-17.0 .0008 .0020 .0045 .0060 .0080 .0093 .0111 .0133 .0159 .0216 .0288 0.01 16.0-17.0 17.0-18.0 .0008 .0020 .0042 .0056 .0073 .0085 .0102 .0126 .0153 .0215 .0270 0.01 17.0-18.0 18.0-19.0 .0006 .0019 .0038 .0050 .0066 .0076 .0091 .0112 .0139 .0201 .0252 0.01 18.0-19.0 19.0-20.0 .0003 .0013 .0031 .0042 .0057 .0067 .0082 .0101 .0122 .0200 .0321 .001 19.0-20.0 20.0-21.0 .0002 .0011 .0028 .0037 </td <td>ŀ</td> <td></td> <td>l</td> <td>1</td> <td></td> <td></td> <td>1</td> <td>]</td> <td></td> <td>1</td> <td>ļ</td> <td></td> <td></td> <td></td> <td>ļ</td>	ŀ		l	1			1]		1	ļ				ļ
16.0-17.0 .0008 .0020 .0045 .0060 .0080 .0093 .0111 .0133 .0159 .0216 .0288 0.01 16.0-17.0 17.0-18.0 .0008 .0020 .0042 .0056 .0073 .0085 .0102 .0126 .0153 .0215 .0270 0.01 17.0-18.0 18.0-19.0 .0006 .0019 .0038 .0050 .0066 .0076 .0091 .0112 .0139 .0201 .0252 0.01 18.0-19.0 19.0-20.0 .0003 .0013 .0031 .0042 .0057 .0067 .0082 .0101 .0122 .0200 .0321 0.01 19.0-20.0 20.0-21.0 .0002 .0011 .0028 .0037 .0050 .0059 .0073 .0090 .0109 .0176 .0379 .001 20.0-21.0 21.0-22.0 .0001 .0012 .0026 .0035 .0048 .0055 .0069 .0082 .0100 .0172 .0214 .0.01 21.0-22.0 22.0-23.0 .0011 .0024 .0033 .0045<			1	1 .	1		.0089	i	l		.0173	. 0256	. 0380	0.01	ŀ
17.0-18.0 .0008 .0020 .0042 .0056 .0073 .0085 .0102 .0126 .0153 .0215 .0270 0.01 17.0-18.0 18.0-19.0 .0006 .0019 .0038 .0050 .0066 .0076 .0091 .0112 .0139 .0201 .0252 0.01 18.0-19.0 19.0-20.0 .0003 .0013 .0031 .0042 .0057 .0067 .0082 .0101 .0122 .0200 .0321 0.01 19.0-20.0 20.0-21.0 .0002 .0011 .0028 .0037 .0050 .0059 .0073 .0090 .0109 .0176 .0379 .001 20.0-21.0 21.0-22.0 .0001 .0012 .0026 .0035 .0048 .0055 .0069 .0082 .0100 .0172 .0214 .0.01 21.0-22.0 22.0-23.0 .0010 .0023 .0032 .0045 .0052 .0063 .0082 .0100 .0172 .0214 .0.01 22.0-23.0 23.0-24.0 .0011 .0024 .0033 .0045 .0052	15.0-16.0		. 0008	. 0020	. 0044	. 0060	. 0080	. 0095	.0114	. 0136	. 0157	. 0220	. 0 3 0 5	0.01	15.0-16.0
18.0-19.0 .0006 .0019 .0038 .0050 .0066 .0076 .0091 .0112 .0139 .0201 .0252 0.01 18.0-19.0 19.0-20.0 .0003 .0013 .0031 .0042 .0057 .0067 .0082 .0101 .0122 .0200 .0321 0.01 19.0-20.0 20.0-21.0 .0002 .0011 .0028 .0037 .0050 .0059 .0073 .0090 .0109 .0176 .0379 0.01 20.0-21.0 21.0-22.0 .0001 .0012 .0026 .0035 .0048 .0055 .0069 .0082 .0100 .0172 .0214 0.01 21.0-22.0 22.0-23.0 .0010 .0023 .0032 .0045 .0052 .0063 .0078 .0094 .0152 .0246 0.01 22.0-23.0 23.0-24.0 .0011 .0024 .0033 .0045 .0052 .0065 .0081 .0102 .0171 .0296 0.01 23.0-24.0 24.0-25.0 .0011 .0024 .0033 .0045 .0052 .0065 </td <td>16.0-17.0</td> <td></td> <td>.0008</td> <td>. 0020</td> <td>.0045</td> <td>. 0060</td> <td>. 0080</td> <td>. 0093</td> <td>.0111</td> <td>. 0133</td> <td>. 0159</td> <td>. 0216</td> <td>. 0268</td> <td>0.01</td> <td>16,0-17.0</td>	16.0-17.0		.0008	. 0020	.0045	. 0060	. 0080	. 0093	.0111	. 0133	. 0159	. 0216	. 0268	0.01	16,0-17.0
19.0-20.0 .0003 .0013 .0031 .0042 .0057 .0067 .0082 .0101 .0122 .0200 .0321 0.01 19.0-20.0 20.0-21.0 .0002 .0011 .0028 .0037 .0050 .0059 .0073 .0090 .0109 .0176 .0379 0.01 20.0-21.0 21.0-22.0 .0001 .0012 .0026 .0035 .0048 .0055 .0069 .0082 .0100 .0172 .0214 0.01 21.0-22.0 22.0-23.0 .0010 .0023 .0032 .0045 .0052 .0063 .0078 .0094 .0152 .0246 0.01 22.0-23.0 23.0-24.0 .0011 .0024 .0033 .0045 .0052 .0065 .0081 .0102 .0171 .0296 0.01 23.0-24,0 24.0-25.0 .0011 .0024 .0033 .0045 .0052 .0065 .0081 .0102 .0171 .0296 .0.01 24.0-25,0 25.0-26.0 .0011 .0024 .0033 .0048 .0052 .0064 .0078<	17.0-18.0		. 0008	. 0020	.0042	. 0056	. 0073	.0085	. 0102	. 0126	. 0153	.0215	. 0270	0.01	17.0-18.0
20.0-21.0 .0002 .0011 .0028 .0037 .0050 .0059 .0073 .0090 .0109 .0176 .0379 0.01 20.0-21.0 21.0-22.0 .0001 .0012 .0026 .0035 .0048 .0055 .0069 .0082 .0100 .0172 .0214 0.01 21.0-22.0 22.0-23.0 .0010 .0023 .0032 .0045 .0052 .0063 .0078 .0094 .0152 .0246 0.01 22.0-23.0 23.0-24.0 .0011 .0024 .0033 .0045 .0052 .0065 .0081 .0102 .0171 .0296 0.01 23.0-24,0 24.0-25.0 .0011 .0024 .0033 .0045 .0052 .0065 .0081 .0102 .0171 .0296 0.01 24.0-25.0 25.0-26.0 .0011 .0024 .0033 .0045 .0052 .0064 .0078 .0099 .0148 .0257 0.01 24.0-25.0 25.0-26.0 .0011 .0024 .0033 .0048 .0056 .0070 .0088 .0107 </td <td>18.0-19.0</td> <td></td> <td>ã000 .</td> <td>.0019</td> <td>.0038</td> <td>. 0050</td> <td>. 0066</td> <td>. 0076</td> <td>. 0091</td> <td>. 0112</td> <td>. 0139</td> <td>. 0201</td> <td>. 0252</td> <td>0.01</td> <td>18.0-19.0</td>	18.0-19.0		ã000 .	.0019	.0038	. 0050	. 0066	. 0076	. 0091	. 0112	. 0139	. 0201	. 0252	0.01	18.0-19.0
21.0-22.0 .0001 .0012 .0026 .0035 .0048 .0055 .0069 .0082 .0100 .0172 .0214 0.01 21.0-22.0 22.0-23.0 .0010 .0023 .0032 .0045 .0052 .0063 .0078 .0094 .0152 .0246 0.01 22.0-23.0 23.0-24.0 .0011 .0024 .0033 .0045 .0052 .0065 .0081 .0102 .0171 .0296 0.01 23.0-24,0 24.0-25.0 .0011 .0024 .0033 .0045 .0052 .0064 .0078 .0099 .0148 .0257 0.01 24.0-25.0 25.0-26.0 .0011 .0024 .0033 .0048 .0056 .0070 .0088 .0107 .0153 .0214 0.01 25.0-26.0	19.0-20.0		. 0003	.0013	. 0031	. 0042	. 0057	. 0067	. 0082	. 0101	. 0122	. 0200	. 0321	0.01	19.0-20.0
22.0-23.0 .0010 .0023 .0032 .0045 .0052 .0063 .0078 .0094 .0152 .0246 0.01 22.0-23.0 23.0-24.0 .0011 .0024 .0033 .0045 .0052 .0065 .0081 .0102 .0171 .0296 0.01 23.0-24.0 24.0-25.0 .0011 .0024 .0033 .0045 .0052 .0064 .0078 .0099 .0148 .0257 0.01 24.0-25.0 25.0-26.0 .0011 .0024 .0033 .0048 .0056 .0070 .0088 .0107 .0153 .0214 0.01 25.0-26.0	20.0-21.0		. 0002	. 0011	, 00ZB	. 0037	. 0050	. 0059	. 0073	. 0090	. 0109	.0176	. 0379	0.01	20.0-21.0
23.0-24.0	21.0-22.0		.0001	.0012	.0026	. 0035	. 0048	. 0055	.0069	.0082	.0100	. 0172	.0214	0.01	21.0-22.0
24.0-25.0	22.0-23.0			.0010	.0023	. 00 3Z	. 0045	.0052	. 0063	. 0078	. 0094	, 0152	. 0246	0.01	22, 0-23.,0
25.0-26.0 .0011 .0024 .0033 .0048 .0056 .0070 .0088 .0107 .0153 .0214 0.01 25.0-26.0						,			· ·	1					
						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						ł			,
26.0-27.0 0011 0024 0034 0047 0055 0066 0081 0098 0169 0283 0.01 26.0-27.0	1														
	26.0-27.0			.0011	. 0024	.0034	.0047	. 0055	.0068	.0081	. 0098	.0169	. 0283	0.01	26.0-27.0
				<u> </u>								<u> </u>			

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE	VIII-2 1	DISTRIBUTIO	N OF VECT	OR WIND SI	IEARS				VECTO: DIS:	R WIND S FRIBUTIO	HEAR On
STATION:			SANTA MON	TCA, CALIF	ORNIA							*		
REFEREN	CE PERIOD:		JANUARY									SANTA MON	IICA, CÀ	LIFORNIA
STATION I	LEVÁTION		125 feet or	38,1 meters	MSL								JANUAR	Y
STATION C	COORDINATI	ES:	34.01 deg N	, 118.27 de	W									
PERIOD O	F OBSERVA	TION:			January I, a April 16,							<u>-</u>		
DATA SOU	RCE:		National We U. S. Weath		de Center			·····			···	NO. OF OBS		ACH LEVE
PREPAREI	3 RV		Asheville, National Ass	forth Caroli	na d Space Adm	nistration						 	620 UNITS:	
FREIAREI			Marshall Sp Aerophysics February 23	ace Flight C and Astropi , 1962	d Space Admi enter, Aerot hysics Branc	allistics Div h, Huntsvill	islon e, Alabama					inver	e second	(sec ⁻¹)
Alt. Layer					MULATIVE	PERCENTA	CE ÉRFOUE	NCV				Maximum	Pet.	Alt. Lay
(MSL)	0.135	2. 2A	15.9	50 0	66.0	H4. 1	90.0	95.0	97.72	99.0	99.865	Shear	Freq.	(MSL)
sfc- I.O	3.133	4.40	.0020	.0042	. 0059	.0074	, 0091	.0107	.0135	.0158	.0179	.0179	0. 32	sfc- 1.
1.0- 2.0		. 0009	. 0023	.0051	. 0066	. 0090	.0102	.0120	.0131	.0144	.0203	.0204	0.16	1.0- 2.
Z.O- 3.0		. 0009	. 0025	.0054	. 0070	.0099	.0109	. 0130	.0148	.0169	.0203	. 0308	0.16	2.0- 3.
3.0- 4.0		. 0009	. 0021	. 0046	. 0061	.0085	.0098	.0123	.0149	.0164	0279	. 0280	0.16	3.0- 4.
4.0- 5.0		. 0009	. 0022	. 0046	.0061	.0080	.0099	.0119	.0147	.0155	.0289	. 0290	0.16	4.0- 5.
5.0- 6.0		. 0008	. 0020	. 0043	.0060	. 0079	.0095	.0122	.0150	.0186	.0239	.0240	0.16	5.0- 6
6.0- 7.0		. 0005	0020	.0043	.0062	.0081	.0100	.0129	.0161	. 0205	.0279	.0280	0.16	6.0. 7
7.0- 8.0		.0004	0021	. 0046	.0064	. 0087	.0102	.0131	.0171	. 0194	.0250	, 0251	0.16	7.0- 8
8.0- 9.0		. 0006	. 0021	. 0048	. 0065	. 0096	.0110	.0135	.0158	.0188	.0351	.0352	0.16	8.0- 9.
9.0-10.0		.0008	. 0022	.0051	. 0070	. 0100	. 0121	.0159	. 0186	. 0225	.0299	. 0300	0.16	9.0-10.
10.0-11.0		. 0009	. 0023	. 0055	. 0077	. 0107	. 0129	.0157	.0201	. 0264	.0326	. 0327	0.16	10.0-11
11.0-12.0		. 0002	. 0025	. 0059	. 0080	. 0112	. 0135	. 0177	. 0209	. 0238	. 0329	. 0330	0.16	11.0-12
12.0-13.0		.0010	. 0030	. 0062	. 0090	.0119	.0144	.0178	. 0225	. 0247	. 0291	. 0292	0.16	12, 0-13
13.0-14.0	İ	.0009	. 0029	. 0061	. 0081	. 0109	. 0127	. 0154	.0195	. 0231	. 0287	. 0288	0, 16	13,0-14
14.0-15.0		. 0008	0024	. 0057	. 0079	. 0102	. 0120	. 0148	.0190	. 0234	. 0339	.0340	0.16	14.0-15
15.0-16.0	.1	. 0008	. 0022	. 0050	. 0072	.0100	.0116	. 0139	. 0159	.0199	. 0249	. 0250	0.16	15.0-16
16.0-17.0	l	. 0009	. 0023	. 0050	. 0067	. 0091	.0103	. 0125	.0143	. 0169	. 0287	. 0288	0.16	16.0-17
17.0-18.0	-	8000	. 0020	. 0051	.0068	. 0087	.0104	.0140	. 0160	.0181	. 0223	. 0224	0.16	17.0-18
18.0-19.0		.0009	. 0021	. 0045	. 0062	. 0080	. 0091	.0115	.0148	.0191	.0240	. 0241	0.16	18.0-19
19.0-20.0		.0007	.0016	. 0039	0051	. 0070	. 008Z	. 0105	.0125	. 0152	.0200	. 0201	0.16	19.0-20
20,0-21.0		. 000Z	.0016	. 0031	. 0042	. 0058	.0068	. 0086	.0102	. 0123	.0174	. 0175	0.16	20.0-21
21.0-22.0	ŀ		.0011	. 0025	. 0037	.0050	. 0059	. 0074	.0091	.0108	. 0134	. 0135	0.16	21.0-22
22.0-23.0	l		. 0011	. 0026	. 0037	. 0051	. 0060	. 0073	. 009Z	.0115	. 0207	. 0208	0.16	22.0-23
23.0-24.0			.0010	.0026	0035	. 0048	.0056	. 0072	.0088	.0098	.0123	.0124	0.16	23.0-24
24.0-25.0			.0010	. 0027	. 0039	. 0051	.0057	. 0066	.0084	.0114	.0164	.0165	0.16	24.0-25
25.0-26.0			. 0011	. 0029	.0040	. 0055	.0067	. 0083	. 0099	.0113	. 0156	. 0157	0.16	25.0-26
26.0-27.0			.0011	. 0030	. 0040	. 0052	.0061	. 0072	.0088	. 0095	. 0176	.0177	0.16	26.0-27
										ł	l	1		

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

STATION: REFERENC STATION F:	E DEBIOD						OR WIND SH					<i>D</i>	RIBUTIO	N
STATION F	C DEBIOD		SANTA MON	CA, CALIFO	ORNIA		, 					SANTA MON	ICA, CA	LIFORNIA
			FEBRUARY											
STATION C	LEVATION	l;	125 feet or 3	8.1 meters !	MSL						L	FE	BRUARY	
	OORDINAT	ES:	34.01 deg N	118.27 deg	w		-							
PERIOD OF	OBSERVA	TION:	Long Beach, Santa Monica	California , California	January I, i April It, i	14 انتہاد-956 956-Decemb	7, 1956 er 31, 1960							
DATA SOUR	RCE:		National Wes	ther Record		· · · · · · · · · · · · · · · · · · ·						NO, OF OBS	FOR E	CH LEV
	•		U. S. Weath Ashaville, N	larth Caralin					•			<u> </u>	568	
REPARED	BY:		National Aer Marshall Spi Aerophysics	onsutice and ice Flight Co and Astroph	Space Admi enter, Aerob vulce Brancl	nistration allistics Div h. Huntsville	ision , Alabama					invers	UNITS:	feer - 11
			February 23	, 1962								-		, , , , , , , , , , , , , , , , , , ,
t. Layer (MSL)				CU	MULATIVE	PERCENTAC	E FREQUE	VCY				Maximum Shear	Pct. Freq.	Alt. Ia (MSI
km (MSL)	0, 135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	1		km
sfc- 1.0			. 0017	. 0041	. 0055	.0080	.0092	.0113	.0137	. 0161	.0210	.0211	0.18	afc-
.0- 2.0		. 0009	. 0022	.0050	.0067	,0089	,0100	.0119	.0145	.0173	.0217	,0218	0.18	1.0-
2.0- 3.0		. 0009	. 0026	.0054	. 0069	. 0089	.0100	.0123	.0145	.0162	. 0272	. 0273	0.18	2.0-
3.0- 4.0		. 0008	. 0023	.'0046	. 0060	.0082	0095	.0120	. 0149	.0168	, 0224	. 0225	0.18	3.0-
. O- 5. D		. 0005	.0020	.0047	.0060	. 0081	. 0092	. 0115	. 0150	.0188	. 0240	.0241	0.18	4.0-
.0- 6.0		.0006	.0020	. 0044	. 0059	.0080	. 0098	. 0129	. 0155	.0207	. 0293	. 0294	0.18	5.0-
.0- 7.0		.0004	.0019	. 0043	. 0061	.0084	. 0100	. 0129	.0164	.0189	. 0261	. 0262	0.18.	6.0-
7.0- 8.0		. 0009	. 0021	. 0049	. 0068	. 0088	. 0104	. 0134	.0174	. 0224	. 0270	. 0271	0,18	7.0-
3,0- 9.0		.0001	.0020	.0050	. 0069	. 0096	. 0119	. 0135	.0170	. 0193	. 0229	. 0230	Q. 1B	8.0-
9.0-10.0		. 0003	. 0020	. 0050	.0071	.0104	. 0132	.0167	.0220	. 0244	.0318	. 0319	0.18	9.0-
0.0-11.0		.0009	0025	. 0059	. 0083	. 0126	.0148	.0180	. 0227	. 0252	. 0335	. 0336	0.18	10.0-
1.0-12.0		0008	.0027	. 0067	. 0087	.0119	.0137	.0164	. 0209	. 0242	.0333	. 0334	0.18	11.0-
2. 0-13. 0		.0009	. 0028	.0063	.0088	. 0120	.0140	.0164	.0194	. 0230	.0386	. 0387	0.18	12.0-
3, 0-14. 0		.0009	.0029	. 0059	. 0081	. 0112	.0133	. 0153	.0189	. 0217	,0413	. 0414	0.18	13.0-
4.0-15.0		. 0009	.0021	. 0055	. 0077	.0108	.0130	. 0151	. 0176	. 0221	.0346	. 0347	0.18	14.0-
5.0-16.0		.0003	.0021	.0051	. 0072	.0101	,0120	. 0140	. 0171	. 0209	. 0304	. 0305	0.18	15.0-
6.0-17.0		.0009	.0022	.0050	. 0067	,0088	.0104	. 0129	. 0163	.0181	. 0212	. 0213	0.18	16.0-
7.0-18.0		,0009	.0022	.0050	.0068	. 0090	. 0102	. 0126	. 0160	.0184	. 0259	. 0260	0.18	17.0-
B. 0-19. 0		.0003	.0021	.0048	. 0059	. 0080	. 0090	. 0109	.0131	.0151	. 0209	. 0210	0, 18	18.0-
9.0-20.0		.0003	.0019	. 0036	.0050	. 0072	. 0083	. 009B	. 0121	. 0133	, 0288	. 0289	0.18	19.0-
0.0-21.0			.0013	. 0030	. 0043	.0061	.0073	. 0094	.0119	.0179	. D37B	. 0379	0.18	20.0
1.0-22.0		.0001	.0011	. 0029	. 00 38	,0053	. 0062	.0074	. 0091	.0100	.0172	. 0173	0.18	21,0-
2.0-23.0		'	.0010	.0024	.0033	.0048	. 0056	.0066	.0081	.0106	. 0245	. 0246	0.18	22.0-
3,0-24.0			.0010	.0025	.0035	.0047	.0059	.0074	.0091	.0120	. 0250	. 0251	0.18	23.0-
1			.0010	.0027	.0037	. 0050	,0058	.0071	.0092	.0116	. 0221	. 0222	0,18	24.0-
4.0-25.0			.0010	.0027	,0039	.0054	.0064	. 0090	.0108	. 0135	.0154	. 0155	0,18	25.0
25.0-26.0			.0011	.0030	.0040	. 0057	.0071	.0089	.0101	.0122	.0181	, 0182	0.18	26.0-
6. 0-27. 0]		.00,00		'								

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

STATION: AEFERENCE PER STATION FLEVATION FLEVATION GOOD OF OBSE DATA SOURCE; PREPARED BY: Alt. Layer (MSL) km 0.13 sfc-1.0 1.0-2.0	IOD: 3 PION: NATES: RVATION: 5 2.28	ANTA MONIC MARCH 125 (eet er 38 34.01 deg N, Long Beach, 6 Senta Menica, National Weat U, S. Weather Ashaville, No National Aseo Marshall Spac Asrophysics a February 23, 15.9 .0020 .0021	. I meters M 118.27 deg California her Records r Bureau rth Carolina mantics and e Flight Ce and Astrophy 1962	W Innuary 1, 1 ^o April 1k, 1 ^o Center	istration illistics Divi if ituntaville	sion Alabama					NO, OF OBS	NRCH	CH LEVEL:
STATION ELEVATION COORDI STATION COORDI PERIOD OF OBSE DATA SOURCE; PREPARED BY: Alt. Layer (MSL) km 0.13 sfc- 1.0 1.0- 2.0	TION: NATES: RVATION: 5 2.28 .0009 .0007	34.01 deg N. Long Beach, (Santa Memica, National Weat U. S. Weather Ashe: ille, No National Aero Marshall Spac Aerophysics a February 23.	California California her Records r Burean rth Caroline nanifics and cond Astrophy 1962 CUM 50.0	W April 1b, 1' April 1b, 1' Center Space Admirator, Aerobe Aut. Arthur Arthur Arthur Arthur Arthur Arthur Arthur Aut. Aut. Aut. Aut. Aut. Aut. Aut. Aut.	istration illistics Divi if ituntaville	sion Alabama					NO, OF OBS	FOR EA	
PERIOD OF OBSE DATA SOURCE: PREPARED BY: Alt. Layer (MSL) km 0.13 sto-1.0 1.0-2.0	NATES: RVATION: 5 2,28 .0009 .0007	Long Beach, Canta Menica, National Weat U, S. Weather Ashaville, No National Aero Marshall Spac Aerophysics a February 23,	California California her Records r Bureau rth Caroline manufics and r Flight Ce and Astrophy 1962 CUN 50.0	April 18, 19 Genter Genter Space Admir Archer Arche	istration illistics Divi if ituntaville	sion Alabama						620 UNITS:	
PERIOD OF OBSE DATA SOURCE; PREPARED BY: Alt. Layer (MSL) km 0,13 sc-1.0 1,0-2,0	5 2,28 .0009 .0007	Long Beach, Canta Menica, National Weat U, S. Weather Ashaville, No National Aero Marshall Spac Aerophysics a February 23,	California California her Records r Bureau rth Caroline manufics and r Flight Ce and Astrophy 1962 CUN 50.0	April 18, 19 Genter Genter Space Admir Archer Arche	istration illistics Divi if ituntaville	sion Alabama						620 UNITS:	
DATA SOURCE; PREPARED BY: Alt. Layer (MSL) km 0.13 afc- 1.0 1.0- 2.0	5 2, 28 .0009 .0007	Santa Monica, National Weat U, 3. Weather Ashe: lile, No National Aero Marshall Spac Aerophysics a Fehruary 23,	California her Records r Burean rth Caroline manifes and e- Flight Ce and Astrophy 1962 CUM	April 18, 19 Center Space Admir nfer, Aerobe yeice Brench	istration illistics Divi if funtaville	sion Alabama						620 UNITS:	
PREPARED BY: Alt. Layer (MSL) km 0.13 sfc- 1.0 1.0- 2.0	5 2.28 .0009 .0007	U. S. Weather Ashaville, No Netional Aero Marshall Spac Aerophysics a February 23,	r Bureau rih Carolina manilea and es Flight Cer and Astrophy 1962 CUN	Space Admir nter, Aerobe vaice Branch	ERCENTAG		I.C.V					620 UNITS:	 -
Alt. Layer (MSL) (5 2.28 .0009 .0007	Asheville, No National Aero Marchall Spac Aerophysics a February 23,	rth Caroline manifes and e Flight Cau ind Astrophy 1962 CUN 50.0	Space Admir nter, Aerobe valce Branch	ERCENTAG		I.r.y				Inverse	UNITS:	3 (aaa-1)
Alt. Layer (MSL) (5 2,28 0009	15.9 .0020	50.0	AULATIVE I	ERCENTAG		I/V				Invara	ancond:	
(MSL) km 0.13 sfc- 1.0	5 2,28	15.9	CUN 50.0			E FREQUE	I/V				1 1	- 200,000	1000 1
(MSL) km 0.13 sfc- 1.0	.0009 .0007	. 0020	50.0				r				Maximum	Pet.	Alt. Layer (MSL)
sfc- 1.0	.0009 .0007	. 0020	.0043		84. L	90.0	95.0	97.72	99.0	99.865	Shear	Freq.	km
1.0- 2.0	, 6007	,0021		, 0060	. 0800	. 0074	,0113	.0125	.0143	. 0234	, 0235	0.16	pfc- 1,0
	1 ,555,		.0046	. 0060	. 0065	, 0100	.0116	,0144	.0167	.0215	.0216	0, 16	1.0- 2.0
2.0- 3.0	1	, 0021	.0049	. 0063	. 0083	.0096	,0119	.0139	0183	. 0244	. 0245	0, 16	2.0- 3.0
3.0- 4.0	, 0006	.0021	. 0042	. 0054	.0072	.0083	.0100	. 6120	,0144	. 6232	. 0233	0.16	3.0- 4.0
4.0- 5.0	. 0004	.0019	.0037	, 0050	, 0064	, 0076	. 0091	.6110	. 0136	. 0213	. 0214	0.16	4.0- 5.0
5.0- 6.0	. 0007	.0019	, 0038	. 0051	. 0069	.0080	. 9097	.0110	,0154	. 0343	. 0344	0.16	5.0- 6.0
6.0- 7.0		.0015	. 0034	.0049	, 0065	, 0077	. 0092	.0121	, 6162	. 0320	,0321	0.16	6.0- 7.0
7,0- 8.0	. 0005	,0019	. 0041	.0056	. 0077	.0086	. 8310	,0130	. 0169	. 0229	. 0230	0, 16	7.0- 8.0
B. 0- 9. 0	, 0006	.0019	. 0040	, 0058	,0081	, D300	, 0110	. 0152	. 0192	, 0301	. 0302	0.16	8.0- 9.0
7.0-10.0	,0006	. 0020	,0050	. 0069	.0100	, 0129	.0174	.0220	. 0276	.0340	. 0341	0.16	9,0-10.0
10.0-11.0	. 0009	.0023	. 0053	. 0075	.0112	. 0139	.0174	.0216	,0241	, 637 7	.0380	0.16	10.0-11.0
11.0-12.0	.0009	. 0022	, 0052	. 0075	. 0103	.0120	.0152	.0173	0190	. 6310	. 0311	0.16	11,0-12,0
12.0-13.0	.0009	.0024	. 0056	. 0077	.0105	.0123	.0151	,0181	.0217	.0312	0313	0,16	12.0-13.0
13,0-14.0	, 0007	. 0021	, 0050	. 0069	. 0095	,0110	.0137	,0183	. 0234	. 0303	.0304	0.16	13.0-14.0
14.0-15.0	. 9009	, 6020	. 6049	.0062	.0080	. 0897	, 9110	,013Z	. 0170	, 0224	, 0225	0, 16	14,0-15.0
15.0-16.0	0002	.0020	. 0042	.0057	, 0674	.0090	. 0106	.0120	.0138	.0190	. 6191	0.16	15.0-16.0
16.0-17.0	. 0007	. 0020	, 0045	. 0060	. 0082	. 0094	. 0120	.0139	,0171	,0190	.0191	0.16	16.0-17.0
17.0-18.0	.0010	. 0022	. 0048	. 0860	. 0079	. 0090	. 0102	.0122	.0134	.0257	. 0258	0.16	17,0-18.0
18.0-19.0	. 0009	.0022	. 0044	. 0059	. 0073	.0081	.0095	.0108	, 0130	. 0251	. 0252	G. 16	18.0-19.0
19.0-20.0	.0003	.0019	. 0040	. 0050	. 0065	.0072	0087	.0110	.0139	. 0170	. 0171	0.16	19.0-20.0
20.0-21.0	1000	.0014	. 0031	,0042	. 0057	.0067	,0080	. 0097	.0115	. 0150	. 0151	0.16	20,0-21.0
21.0-22.0		.0010	. 0029	. 0036	. 0050	.0059	.0072	. 0089	. 0100	.01686	. 01695	0,16	21.0-22.0
22.0-23.0	10001	.0010	. 0023	,0033	.0046	, 0053	. 6067	, 0087	. 0103	. 01526	. 01535	0, 16	22,0-23.0
23.0-24.0	.0001	.0010	. 0022	.0032	,0048	. 0057	. 0069	.0077	. 0085	.01716	. 01725	0.16	23,0-24.0
24, 0-25. 0		.0010	. 0024	.0034	.0047	.0054	. 0068	.0081	. 8092	.01116	.01125	0.16	24.0-25.0
25, 0-26. 0		.0010	.0022	. 0032	. 0049	.0059	. 0072	. 0093	.0131	.01996	. 02005	0.16	25.0-26.6
26.0-27.0		.0010	. 0022	. 0030	. 0042	. 0051	. 0069	. 0084	. 0094	, 01656	. 01665	G, 16	26, 0-27.
<i>i</i> 1												<u>L</u>	

NOTE: (1) When the percent frequency of minimum shear exceeded 2. 28 and/or 0. 135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE	VIII-5 [DISTRIBUTIO	N OF VECT	OR WIND SI	EARS					R WIND 5 PRIBUTIO	
STATION:			SANTA MON	ICA, CALIF	ORNIA							SANTA MO	UCA CA	LICORMIA
REFERENC			APRIL									SANTA MUI	ILA, CA	LIFORNIA
STATION E	ELEVATION	l:	125 feet or	18. I metera	MSI.						L		PRIL	
STATION C	COORDINAT	ES:	34.01 deg N	, 118.27 deg	w									
PERIOD OF	F OBSERVA	TION:	Long Beach, Santa Monic	California a. Californii	January I. April 18,	1956-April 1 1956-Decemi	7, 1956 her 31, 1960							
DATA SOU	RCE:		National West U. S. Weath	er Durezu								NO, OF OR	600	CH LEVEL:
PREPARE	BY:		Asheville, National Ass Marshall Sp Asrophysics February 23	onautics and ace Flight C and Astroph	na I Space Admi enter, Aerot nysics Branc	inistration sallistics Div h. Huntsville	ision s, Alabams					inver	UNITS:	(sec-1)
Alt. Layer			Patriary 23		MULATIVE	DERCENTA	TE EDECATE	NCV		-		Maximum	Pct.	Alt. Layer
(MSL)	0.135	2, 28	15.9	50.0	68.0	FA. 1	90 0	95. U	97.72	99.0	99.165	Shear	Freq.	(MSL)
efc- 1.0	V. 133	. 0002	.0020	.0042	.0058	.0077	.0087	.0104	.0122	.0134	.0180	.0181	0.17	efc- 1.0
1,0- 2.0		. 0008	. 0023	. 0049	. 0064	0082	. 0095	.0109	.0133	. 0149	.0218	. 0219	0, 17	1.0- 2.0
2.0- 3.0		. 0009	.0020	,0047	.0060	.0078	. 0090	.0105	. 0131	.0164	.0262	. 0263	0.17	2.0- 3.0
3, 0 - 4, 0		. 0008	. 0020	.0040	. 0053	.0072	. 0082	.0100	. 0119	. 0165	. 0295	. 0296	0.17	3.0- 4.0
4.0- 5.0		. 0009	. 0021	. 0042	.0056	.0073	. 0083	.0103	. 0129	. 0170	. 0302	.0303	0.17	4.0- 5.0
5.0- 6.0		. 0003	.0017	. 0038	. 0051	. 0070	. 0083	.0104	. 0135	. 0175	. 0265	. 0266	0, 17	5.0- 6.0
6.0- 7.0		. 0005	.0019	. 0039	.0051	. 0069	.0080	.0109	.0142	. 0200	.0326	. 0327	0.17	6.0- 7.0
7.0- 8.0		. 0004	. 0015	.0037	. 0050	. 0072	. 0090	.0114	. 0151	. 0179	. 0370	. 0371	0.17	7.0- 8.0
8.0- 9.0		. 0004	. 0015	. 0039	. 0052	. 0072	. 0085	.0110	. 0136	. 0150	.0182	. 0183	0.17	8.0- 9.0
9.0-10.0		. 0005	. 0020	. 0041	. 0059	.0081	.0096	.0116	. 0134	.0182	. 0298	. 0299	0.17	9.0-10.0
10.0-11.0		. 0003	.0019	, 0041	. 0058	. 0082	. 0099	.0128	.0148	. 0177	. 0273	. 0274	0.17	10.0-11.0
11,0-12,0		. 0003	. 0021	, 0045	. 0063	.0089	. 0103	.0121	.0144	.0173	.0322	. 0323	0.17	11,0-12,0
12.0-13.0		. 0009	. 0022	. 0055	. 0072	. 0100	.0118	.0144	. 0160	. 0212	. 0259	. 0260	0.17	12.0-13.0
13.0-14.0		. 0006	. 0020	. 0049	.0068	. 0094	.0110	.0148	. 0172	. 0202	. 0343	. 0344	0.17	13.0-14.0
14.0-15.0		. 0009	. 0020	. 0043	.0061	. 0087	. 0098	.0115	.0134	.0149	.0171	. 0172	0.17	14.0-15.0
15.0-16.0		.0006	. 0019	. 0040	. 0052	. 0070	. 0082	.0100	. 0122	. 0154	. 0250	. 0251	0.17	15.0-16.0
16.0-17.0		. 0005	. 0019	.0042	. 0059	. 0080	. 0091	.0111	. 0159	. 0198	. 0259	. 0260	0.17	16.0-17.0
17.0-18.0		. 0007	. 0021	. 0043	. 0059	. 0075	. 0090	.0105	.0123	. 0149	. 0230	. 0231	0.17	17.0-18.0
18.0-19.0		. 0008	. 0020	.0040	.0052	. 0071	.0080	. 0093	. 0110	. 0135	. 0201	. 0202	0.17	18.0-19.0
19.0-20.0.		. 0003	.0014	.0033	.0042	. 0059	. 0066	.0086	. 0102	.0113	.0141	.0142	0.17	19.0-20.0
20.0-21.0		. 0002	.0012	. 0030	. 0042	. 0058	. 0065	,0077	. 0089	. 0103	. 0179	.0180	0.17	20.0-21.0
21.0-22.0	j	. 0002	.0011	. 0026	. 0037	. 0052	. 0062	.0079	. 0101	. 0149	. 0199	. 0200	0.17	21.0-22.0
22.0-23.0			. 0010	. 0024	. 0036	. 0050	. 0058	. 0071	, 0086	. 0119	. 0145	.0146	0.17	22.0-23.0
23.0-24.0			. 0010	. 0024	. 0033	. 0047	. 0059	. 0080	. 0102	. 0122	. 0169	. 0170	0.17	23.0-24.0
24.0-25.0			. 0009	. 0021	.0031	. 0046	. 0056	. 0069	. 0081	. 0103	, 0146	.0147	0.17	24.0-25.0
25, 0-26, 0			.0009	. 0021	.0031	. 0048	. 0056	. 0076	. 0094	.0117	. 0143	.0144	0.17	25.0-26.0
26.0-27.0			2009	. 0022	.0033	. 0050	. 0061	. 0078	0100	.0124	. 0185	.0186	0.17	26.0-27.0
								L		200		I		

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

	,		TABLE V	m-6 D	estribution	OF VECTO	R WIND SHE	ARS				VECTOR	WIND SI	HEAR N
STATION:			BANTA MON	CA, CALIF	ORNIA							SANTA MON	IGA, GAI	LIFORNIA
	E PERIOD		MAY	. 1	\									
STATION I	LEVATION	ı	125 feet or 3	e, i metere	MBL							<u> </u>	4AY	
STATION C	COORDINAT	ES:	34.01 dag N.	118.27 deg	W		•						·	
PERIOD OF	OBSERVA	TION	Long Beach, Santa Monice	California , California	January I, I April 18, I	956-April 11 956-Decemb	7, 1956 er 31, 1960							
ATA SOU	RCEI		National Wor	ther Record				- -				NO. OF ORS		CH LEV
			4 4 - 111 - A	Consti	14	determine.						 -	UNITS:	
REPARE	D BY:		National Aer Marshall Spe Aerephysics February 23	onautics and ice Flight C and Astropi	Space Admili enter, Aurob tysics Branch	ailistics Div	ision , Alsberna					invers	e second	(sec-1)
Layer			rearmary 23		MULATIVE	PERCENTAC	E FREQUE	(CY	*****			Maximum	Pet. Freq.	Alt. La
MSL)	0, 139	2, 28	15.9	50.0	68.6	84.1	90.0	95.0	97.72	99.0	99,865			km
fe- 1.0		T	. 0020	.0042	.0053	.0069	.0078	. 0089	.0107	.0126	. 0176	.0177	0.16	efc-
.0- 2.0	. 0001	, 0000	. 0024	. 0052	. 9047	. 0083	.0092	.0108	.0[22	.0136	.0192	. 0193	9.16	1.0-
.5- 3.0	, 0001	.0009	. 0021	.0046	. 0059	.0074	.0087	. 0100	.0121	. 0135	. 0183	.0184	0.16	2.0-
6- 4.0	,	.0004	. 0030	.0041	. 0053	.0074	.0086	. 0103	. 0230	. 0145	.0213	.0214	0.16	3.0-
.0. 5.0		.0006	.0019	. 0038	.0050	. 0069	.0081	, 0094	. 0137	.0158	.0214	0215	0. 16	4.0-
.0- 6.0	ļ ·	.0005	.0017	.0036	. 0049	. 1065	. 8079	.0098	.0317	.0157	. 0266	. 0267	0.14	5.0-
.0- 7.0		.0006	.0016	.0035	.0047	. 0055	.0077	.0102	0126	.0162	.0276	, 0277	0.16	6.0-
7.0- 8.0	Ì	.0003	. 0015	.0038	.0850	. 0065	.0073	. 0090	.0113	. 01 34	. 0299	. 0300	0.16	7:0-
. 0. 9.0		.0006	.0016	.0036	.0051	. 0075	.0089	. 0103	.0128	.0165	. 0305	. 0306	0.16	8.0-
, 0-10.0		.0009	.0019	.0040	.0057	. 0078	.0089	.0112	. 0140	. 0170	. 0228	. 0327	0, 16	9.0-
. 0-11. 0		.0009	, 6019	.0041	.0056	. 0076	.0048	. 0124	.0141	.0161	.0314	. 0315	0.16	10.0-
. 0-13.0	,	.0006	.0020	.0042	.0059	. 0085	.0102	.0130	.0181	.0007	.0396	. 0397	0.16	11.0-
2.0-13.0		.0009	.0023	.0049	.0066	.0088	.0108	.0131	,0151	. 0980	. 0329	. 0330	0.16	12.0-
3.0-14.0		. 0009	.0021	0047	.0045	,0090	.0103	.0131	.0148	.0173	. 0352	. 0353	0.16	13.0-
4.0-15.0	:	.0005	.0021	.0046	.0062	,0062	.0099	.0120	.0140	. 0150	.0177	.0180	0.16	14.0-
		.0007	.0020	.0045	.0059	.0079	.0094	. 0110	.0131	.0152	.0189	.0190	0.16	15.0-
5.5-16.0		.0009	.0020	.0046	. 0057	.0080	.0090	.0103	.0127	.0150	. 0272	.0173	0.16	16.0-
6.0-17.0		.0004	.0022	.0044	.0056	.0074	.0086	.0106	.0125	.0156	.0227	0222	0.16	17.0-
7.0-18.0		0004	.0020	.0041	.0055	.0073	.0088	.0100	.0131	. 0153	.0206	. 0267	0.16	18.0-
0.0-19.0	.0001	.0005	,0014	.0034	.0046	.0063	.0074	.0100	.0129	. 0283	.0281	. 0262	0.16	19,0-
9.0-20.0 6.0-21.0		.0003	.0010	.0026	.0036	.0049	.0055	, 0073	. 0087	. 0098	.0142	.0143	0.16	20.0-
1.0-21.0	l	.0001	.0010	.0021	.0030	.0041	. 0649	. 0057	. 0073	.0058	.0199	. 0200	0.16	21.0
		, , ,	.0010	.0020	.0030	.0042	,0052	.0061	.0076	. 0095	.0124	. 0124	0.34	22.0
2.0-23.0	I		.0009	.0020	.0030	. 0042	.0052	. 8064	. 9080	.0096	.0143	. 0144	0,16	23.0-
3.0-24.0			.0009	.0020	.0030	.0040	.0047	.0064	.0076	. 0070	.0179	.0180	0.16	24.0
4.0-25.0	l		. 0009	.0020	.0029	.0041	.0050	.0063	.0072	0084	.0104	.0105	0.16	25.0
15.0-24.0		1	.0009	.0020	.0030	.0040	.0047	.0060	.0069	. 0076	.0132	.0133	0.16	26.0
6.0-27.0	Ī	,	. 9007	. 0020			1		1 '			ŀ	1	
-	1	1	1	1	1	ı	1 .	ł	I	1	I	E .	ı	1

NOTE: (I) When the percent frequency of minimum shear exceeded 2.28 and/or 0.335 cumulative percentage frequency, the shear associated with the cumulative percentage frequency

Mart Mart		-		TABLE	/m-7 D	ISTRIBUTIO	N OF VECTO	OR WIND SU	BARS					WIND S	
## PREFABED BY: 1.0					ICA, CALIF	ORNIA							SANTA MON	IIĆA, CA	LIFORNIA
### STATION COORDINATES: 1.6.00	-				R 1 contars	MSI.									
DATA SOUNCE: National Wather Recomb Captill 19. 1996-the-center 11. 1966 DATA SOUNCE: National Wather Recomb Captill 19. 1996-the-center 11. 1966 U.S. Wather Three Sound Captill 19. 1996-the-center 11. 1966 U.S. Wather Three Sound Captill 19. 1996-the-center 11. 1966 DATA SOUNCE: National Wather Recomb Captill 19. 1996-the-center 11. 1966 U.S. Wather Three Sound Captill 19. 1996-the-center 11. 1966 U.S. Wather Three Sound Captill 19. 1996-the-center 11. 1966 U.S. Wather Three Sound Captill 19. 1996-the-center 11. 1966 U.S. Wather Three Sound Captill 19. 1996-the-center 11. 1966 U.S. Wather Three Sound Captill 19. 1996-the-center 11. 1966 U.S. Wather Three Sound Captill 19. 1996-the-center 11. 1966 U.S. Wather Three Sound Captill 19. 1996-the-center 19. 1996-the-cent	31 V 110W	LLEVAINA	•					<u> </u>	-					UNE	
DATA SOURCE:	STATION (COORDINAT	ES:	34.01 deg N	118, 27 deg	w	-,			-				-	
National Astronomics and Space Administrated States September	PERIOD O	r observ	TION:	Long Beach, Santa Monice	California , California	January I April 14. i	954-April i 958-Decemi	7, 1956 per 11, 1960	, ·						
PREPARED BY:	DATA SOU	RCE:	·	U. S. Weath	or Burens				· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		NO, OF ORS		CH LEVEI
	DEFDARE	D BY:		National Aer	orth Canolis onautics and	:Space Adhie	alstration.							UNITS:	
	- NE - AND	, ,,,		Marshall Spe Aerophysics February 23	and Autroph 1964	yelca Pranci	alliodics Div H. Physpaville	ision , Alabama					invers	e second	(*ec ⁻¹)
	lt. Layer.					MELATINE	PERCENTA	GE PREQUE	NCY						Alt. Laye (MSL)
10-2.0 .0001 .0007 .0008 .0008 .0008 .0008 .0008 .0009 .0009 .0008 .0009 .0008 .0009 .0009 .0008 .0009 .0009 .0009 .0008 .0009		0.135	. 2, 28	15.9	59.0	49.0	64.1 .	90.0	95.U	91.72	99.0	99.165			km
.0. 2.0 .0002	sfc- 1.0		.0008	0020	. 0041	. 0051	. 9071	.0080	. 0073	. 0400	0108	.0136	.0139	0,17	afe- 1.0
1.0-4.0 0.0002 0.0002 0.0003 0.0013 0.0040 0.0050 0.0055 0.0075 0.0085 0.0093 0.0112 0.141 0.162 0.17 3.0	.0- 2.0	. 0001	. 0007	. 0021	.0048	.0059	. 0079	. 0089	.0104	. 94116	. 04 35	.0150	.0159	0.17	1.0- 2.6
.0-5.0	.0- 3.0	. 0 0 02	. 0009	. 0627	.0042	. 0055	. 0073	.0081	. 0093	.0102	. 9409	. 0130			2.0- 3.0
0-6.0 0.0005 0.017 0.032 0.042 0.040 0.069 0.080 0.097 0.014 0.33 0.0314 0.17 3.0. 0-7.0 0.0004 0.014 0.031 0.041 0.097 0.067 0.067 0.087 0.087 0.0120 0.174 0.175 0.17 6.0. 0-8.0 0.002 0.0005 0.014 0.033 0.044 0.089 0.069 0.069 0.082 0.095 0.550 0.175 0.176 0.17 7.0. 0-9.0 0.003 0.013 0.032 0.042 0.089 0.069 0.088 0.093 0.089 0.133 0.0144 0.17 8.0. 0-10.0 0.003 0.013 0.037 0.051 0.0970 0.089 0.095 0.120 0.347 0.170 0.0171 0.17 9.0. 0-11.0 0.0005 0.019 0.040 0.051 0.0970 0.089 0.014 0.014 0.322 0.044 0.165 0.17 10.0. 0-12.0 0.0007 0.0019 0.040 0.0052 0.0979 0.0089 0.014 0.322 0.044 0.165 0.17 10.0. 0-13.0 0.004 0.021 0.043 0.058 0.082 0.093 0.100 0.135 0.0205 0.204 0.17 11.0. 0-14.0 0.009 0.0021 0.044 0.0653 0.0087 0.100 0.100 0.134 0.135 0.0202 0.203 0.17 12.0. 0-15.0 0.0009 0.022 0.047 0.065 0.0099 0.100 0.102 0.130 0.155 0.0202 0.200 0.17 11.0. 0-17.0 0.009 0.023 0.050 0.064 0.0051 0.0096 0.102 0.130 0.135 0.0202 0.200 0.17 11.0. 0-19.0 0.001 0.006 0.019 0.040 0.051 0.0065 0.096 0.100 0.100 0.132 0.153 0.0202 0.200 0.17 11.0. 0-22.0 0.0007 0.0023 0.050 0.064 0.0051 0.0066 0.076 0.0137 0.166 0.193 0.194 0.17 11.0. 0-0-22.0 0.0002 0.013 0.031 0.040 0.051 0.0663 0.0074 0.0099 0.0023 0.010 0.011 0.0022 0.011 0.0045 0.0051 0.0046 0.0051 0.0064	.0- 4.0		. 6067	.0000	.0040	. 0050	. 0065	. 0075	. 0085	. 0093	. 04 12	,			3,0- 4.
0.0 0.0	.0- 5.0		. 0005	. 0813	.0034	. 0044	, 0059	. 0070	. 0064	1	1		1		4,0- 5.
.0-8.0 .0002 .0003 .0014 .0033 .0044 .0059 .0069 .0062 .0095 .0120 .0175 .0176 .0.17 .7.0 .0-9.0 .0003 .0013 .0032 .0042 .0099 .0069 .0088 .0093 .0019 .0143 .0144 .0.17 8.0 .0-10.0 .0005 .0017 .0037 .0051 .0059 .0079 .0069 .0089 .0010 .0047 .0010 .0171 .0.17 9.0 .0-11.0 .0005 .0007 .0019 .0040 .0051 .0082 .0082 .0089 .0010 .0114 .0122 .0164 .0165 .0.17 10.0 .0-12.0 .0007 .0019 .0040 .0052 .0082 .0082 .0089 .0010 .0130 .0156 .0203 .0204 .0.17 11.0 .0 .0-13.0 .0004 .0021 .0043 .0058 .0062 .0062 .0069 .0110 .0130 .0156 .0203 .0204 .0.17 11.0 .0 .0-13.0 .0009 .0041 .0048 .00653 .0062 .0069 .0102 .0114 .0149 .0044 .0231 .0282 .0.17 11.0 .0 .0-15.0 .0008 .0021 .0047 .0065 .0089 .0180 .0182 .0192 .0144 .0155 .0203 .0204 .0.17 11.0 .0 .0-15.0 .0008 .0021 .0047 .0065 .0089 .0180 .0182 .0192 .0194 .0130 .0153 .0202 .0203 .0.17 11.0 .0 .0-15.0 .0009 .0023 .0050 .0064 .0090 .0182 .0192 .0194 .0130 .0153 .0202 .0203 .0.17 11.0 .0 .0-15.0 .0009 .0023 .0050 .0064 .0090 .0182 .0192 .0119 .0130 .0153 .0202 .0203 .0.17 11.0 .0 .0-15.0 .0009 .0023 .0050 .0064 .0090 .0185 .0120 .0137 .0153 .0202 .0203 .0.17 11.0 .0 .0-15.0 .0001 .0006 .0019 .0040 .0051 .0066 .0070 .0185 .0120 .0137 .0146 .0155 .0164 .0165 .0.17 16.0 .0-15.0 .0001 .0002 .0013 .0031 .0066 .0090 .0085 .0104 .0123 .0146 .0193 .0194 .0.17 18.0 .0-15.0 .0002 .0013 .0031 .0040 .0051 .0066 .0076 .0099 .0023 .0013 .0031 .0040 .0051 .0066 .0074 .0089 .0088 .0010 .0151 .0101 .0102 .0.17 19.0 .0-22.0 .0010 .0002 .0013 .0031 .0040 .0045 .0045 .0051 .0064 .0074 .0089 .0082 .0150 .0151 .0.17 19.0 .0-22.0 .0010 .0002 .0013 .0031 .0040 .0045 .0045 .0051 .0064 .0074 .0089 .0082 .0150 .0151 .0.17 19.0 .0-22.0 .0010 .0002 .0013 .0031 .0040 .0045 .0045 .0051 .0064 .0074 .0089 .0082 .0150 .0151 .0.17 19.0 .0-22.0 .0009 .0021 .0030 .0040 .0048 .0051 .0046 .0074 .0089 .0082 .0150 .0151 .0.17 12.0 .0 .0-22.0 .0009 .0021 .0030 .0040 .0048 .0051 .0046 .0074 .0089 .0082 .0150 .0151 .0.17 12.0 .0 .0-22.0 .0009 .0020 .0029 .0029 .0029 .0040 .0046 .0051 .0046 .0051 .0064 .0074 .0089 .0052 .0140	.0- 6.0		. 0005	.0017	.0032	. 0042	. 0060	.0069	.0080	.0097					5.0- 6.
.6-8.0 .0092 .0003 .0014 .0033 .0042 .0089	.0- 7.0		.0004	.0014	.0031	.0041	. 9057	. 0067	. 90-78	. 9047	l i			ĺ	6.0- 7.
.o-9,0 .o-10.0	.0- 5.0	.0002	. 0005	.0014	.0033	. 0044	. 0059			,	Ł .				7.0- 8.
0.000 0.0005 0.0007 0.0007 0.0007 0.0007 0.0007 0.0007 0.0007 0.0007 0.0007 0.0007 0.0007 0.0007 0.0007 0.0007 0.0007 0.0007 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0009 0.0008 0.0008 0.0009 0.0008 0.0009 0.0008 0.0009 0.0008 0.0009 0.0008 0.0009 0.0008 0.0009 0.0008 0.0009 0.0009 0.0008 0.0009 0.00009 0.0009 0.0009 0.0009 0.0009 0.0009 0.0009 0.00009 0.0009 0.0009 0.0009 0.0009 0.0009 0.0009 0.00009 0.00009 0.0009 0.0009 0.0009 0.0009 0.0009 0.0009 0.00009 0.0009 0.0009 0.0009 0.0009 0.0009 0.0009 0.000009 0.00009 0.00009 0.00009 0.00009 0.00009 0.00009 0.00009 0.00009 0.00009 0.00009 0.00009 0.00009 0.00009 0.00009 0.00009 0.00009 0.000009 0.000009 0.000009 0.000009 0.000009 0.000009 0.000009 0.000009 0.0	.0- 9.0		. 6003	.0013	. 0032	. 0042		1			L			,	8.0- 9.
0.0-12.0 0.0007 0.019 0.040 0.052 0.0892 0.0099 0.0100 0.0130 0.0156 0.0205 0.0204 0.021 0.043 0.0658 0.0652 0.0093 0.0100 0.0149 0.0404 0.0663 0.067 0.0009 0.0021 0.047 0.0665 0.0097 0.0100 0.0124 0.0149 0.0404 0.0231 0.0232 0.17 12.0 0.0151 0.0152 0.0153 0.0202 0.259 0.260 0.17 14.0 0.0151 0.0153 0.0009 0.021 0.050 0.066 0.090 0.0058 0.0120 0.0137 0.0153 0.0202 0.0203 0.17 15.0 0.0151 0.0153 0.0009 0.021 0.050 0.066 0.0900 0.0055 0.0140 0.022 0.0137 0.0146 0.0153 0.0146 0.0151 0.0153 0.0146 0.0193 0.0146 0.0193 0.0146 0.0193 0.0146 0.0193 0.0146 0.0193 0.0146 0.0193 0.0146 0.0193 0.0146 0.0193 0.0146 0.0193 0.0151 0.17 19.0 0.022 0.0213 0.022 0.0231 0.0055 0.0045 0.0055 0.0064 0.0974 0.0099 0.0098 0.0150 0.0151 0.17 19.0 0.022 0.0131 0.0045 0.0045 0.0051 0.0666 0.0074 0.0099 0.0098 0.0150 0.0151 0.17 19.0 0.022 0.0131 0.0022 0.0031 0.0045 0.0051 0.0666 0.0074 0.0099 0.0098 0.0150 0.0151 0.17 19.0 0.022 0.031 0.0042 0.0048 0.0051 0.0668 0.0061 0.0068 0.0061 0.0125 0.0266 0.17 22.0 0.0221 0.0009 0.0022 0.0031 0.0040 0.048 0.0058 0.0069 0.0082 0.0129 0.17 22.0 0.0225 0.0246 0.0049 0.0049 0.0055 0.0040 0.0055 0.0040 0.0055 0.0070 0.0055 0.0142 0.143 0.17 22.0 0.0025 0.0009 0.0020 0.0020 0.0040 0.0048 0.0055 0.0071 0.0005 0.0142 0.143 0.17 22.0 0.0025 0.0040 0.0040 0.0046 0.0046 0.0055 0.0070 0.0055 0.0142 0.0143 0.17 22.0 0.0025 0.0040 0.0046 0.0046 0.0055 0.0070 0.0055 0.0040 0.0055 0.0040 0.0055 0	.0-10.0		. 0085	.9017	. 0037				ŧ		į.		1		9.0-10.
.0-12.0	.0-11.0		. 0005	0019		,,,,,,,					I .		1	*****	
.0-14.0	.0-12.0		.0007							l	1	'	1		12.0-13.
.0-15.0	.0-13.0		.0004							ł	-		, , , , ,	*,*	13.0-14.
.0-15.0	.0-14.0									l					14.0-15.
.0-17.0			1		1		,	ł .	ļ .	į.			1		15.0-16.
.0-18.0			1				1		1	1	1	[1		16.0-17.
.0-19.0 .0001 .0006 .0019 .0040 .0051 .0066 .0076 .0094 .0118 .0146 .0193 .0194 0.17 18.8 0 .0020.0 .0002 .0013 .0031 .0040 .0055 .0063 .0074 .0089 .0058 .0150 .0151 0.17 19.0 .0021 .0002 .0012 .0025 .0034 .0045 .0051 .0066 .0076 .0064 .0125 .0126 .0.17 20.6 .0022 .0010 .0022 .0031 .0042 .0048 .0057 .0068 .0051 .0101 .0102 0.17 21.0 .0023.0 .0009 .0021 .0030 .0040 .0048 .0058 .0069 .0052 .0128 .0129 0.17 22.0 .0024.0 .0009 .0020 .0030 .0040 .0048 .0058 .0070 .0010 .0295 .0296 0.17 23.0 .0024.0 .0009 .0020 .0029 .0029 .0040 .0046 .0058 .0070 .0010 .0295 .0296 0.17 23.0 .0025 .0029 .0029 .0040 .0046 .0058 .0071 .0009 .0142 .0143 0.17 24.0 .0025 .0026 .0039 .0040 .0048 .0055 .0071 .0009 .0142 .0143 0.17 24.0 .0025 .0026 .0039 .0040 .0048 .0055 .0071 .0005 .0134 .0135 0.17 24.0 .0026 .0009 .0020 .0020 .0029 .0040 .0048 .0055 .0071 .0005 .0134 .0135 0.17 24.0 .0026 .0027 .00			1.	1			İ	}		1	·	1	1		17.0-19.
1.0-22.0			1	į i	l		l						1	l	18.0-19.
.0-21.0 .0002 .0012 .0025 .0034 .0045 .0051 .0066 .0076 .0084 .0125 .0126 0.17 20.0 .0-22.0 .0010 .0022 .0031 .0042 .0048 .0057 .0068 .0083 .0101 .0102 0.17 21.0 .0-23.0 .0009 .0021 .0030 .0040 .0048 .0058 .0069 .0082 .0128 .0129 0.17 22.0 .0.0-24.0 .0009 .0020 .0030 .0040 .0066 .0058 .0070 .0110 .0295 .0296 0.17 23.0 .0-24.0 .0009 .0020 .0020 .0020 .0040 .0066 .0058 .0070 .0110 .0295 .0296 0.17 23.0 .0-25.0 .0009 .0020 .0029 .0040 .0048 .0055 .0071 .0100 .0142 .0143 0.17 24.0 .0-26.0 .0009 .0020 .0020 .0040 .0048 .0055 .0071 .0005 .0134 .0135 0.17 25.0		. 0001			l	•	i .		1 '			i.		1	19.0-20.
.0-22.0 .0010 .0022 .0031 .0042 .0048 .0057 .0068 .0081 .0101 .0102 0.17 21.0 .0.23.0 .0009 .0021 .0030 .0040 .0048 .0058 .0069 .0082 .0128 .0129 0.17 22.0 .0.24.0 .0009 .0020 .0030 .0040 .0048 .0058 .0070 .0110 .0295 .0296 0.17 23.0 .0-24.0 .0009 .0020 .0020 .0020 .0040 .0048 .0058 .0071 .0100 .0142 .0143 0.17 24.0 .0025 .0026 .0029 .0029 .0029 .0029 .0040 .0048 .0055 .0071 .0100 .0102 .0143 0.17 24.0 .0026 .0026 .0029 .0020 .0				1	l			1		1		1	1		20.0-21.
.0-23.0 .0009 .0021 .0030 .0040 .0048 .0058 .0069 .0082 .0128 .0129 0.17 22.0 .0.241.0 .0009 .0020 .0030 .0040 .0046 .0058 .0070 .0110 .0295 .0296 0.17 23.0 .0.25.0 .0009 .0020 .0029 .0024 .0046 .0058 .0071 .0105 .0142 .0143 0.17 24.0 .0.26.0 .0009 .0020 .0026 .0039 .0047 .0057 .0070 .0005 .0134 .0135 0.17 25.0			. 0002		1		· · ·			1	1	1	1	****	21.0-22.
1.0-24.0 .0009 .0020 .0030 .0040 .0058 .0070 .0110 .0295 .0296 0.17 23.0 .0-25.0 .0009 .0020 .0029 .0040 .0048 .0055 .0071 .0105 .0142 .0143 0.17 24.0 .0-26.0 .0009 .0020 .0026 .0039 .0047 .0057 .0070 .0005 .0134 .0135 0.17 25.0					i	ì				1		i	1	l	22.0-23.
1,0-25.0 .0009 .0020 .0029 .0046 .0055 .0071 .0105 .0142 .0143 0.17 24.0 .0-26.0 .0009 .0020 .0026 .0039 .0047 .0057 .0070 .0005 .0134 .0135 0.17 25.0					i	i	l —			1			1	0.17	23.0-24.
.0-26.0 .0009 .0020 .0020 .0039 .0047 .005T .0070 .0005 .0134 .0135 0.17 25.0			'		[1	1			ł	0.17	24.0-25.
				1	1				1	. 0070	.0005	l.	1	0, 17	25.0-26.
				1	1		1		i	I	i .	.0104	. 0105	0.17	26.0-27
			1	,							1				1

NOTE: (1) When the percent frequency of minimum chear exceeded 2.28 and/or 0.135 curreletive percentage frequency, the shear associated with the cumulative percentage frequency

			TABLE	VIII-B i	DISTRIBUTIO	ON OF VECT	OR WIND SI	EARS					R WIND S	
STATION:			SANTA MON	ICA, CALIF	GIONIA									
REFERENC	-		JULY									SANTA MO	SICA, CA	LIFORNIA
STATION F	LEVATION	1 :	125 feet or	98. 1 meters	MSI.								JULY	
STATION C	COORDINAT	res:	34.01 deg N	, 116 27 de _i	; W									
PERIOD OF	F OBSERVA	ATION:			January I. a. April II.									
DATA SOU	RCE:		National We U. S. Weath Asheville, N	er Bureau								NO. OF ORS	620	ACH LEVEL:
PREPAREI	BY:		National Ac-	ronautics an ace Flight C and Astrop	d Space Adm enter, Aerol hysics Branc	inistration Milistics Div h. Huntscill	isiinn e, Alabama					invers	UNITS:	(sec-1)
Alt. Layer					MULATIVE	LUCKTEMEA	CE CUE AIR	NCV				Maximum	Pct.	Alt. Layer
(MSL)	D. 135	2,21	15.9	50.0	68.0	Γ	90.0		97.72	90 ::	100.177	Shear	Freq.	(MSL)
kin ofc- 1,0	0.115	.0008	.0020	.0037	.0048	. 0062	.0071	95.0 .0082	.0098	99, u .0111	99 165	. 0165	0.16	km sfc-1.0
1.0- 2.0		.0008	.0019	.0040	,0055	.0069	.0078	.0001	.0103	.0116	.0161	.0162	0.16	1.0- 2.0
2,0-3.0		.0003	.0019	.0036	.0047	.0061	0070	.0092	.0093	.0111	.0130	.0131		
3.0- 4.0		.0003	.0016	. 0034	.0044	.0059	.0070	.0082	.0093	.0102	.0140	.0140	0.16	2,0- 3.0 3,0- 4,0
4.0- 5.0		. 0005	.0015	.0031	.0041	.0054	. 0061	0079	.0086	.0102	.0164	.0140		
5.0- 6.0		. 0003	.0014	.0033		.0054		.0072	.0087	1			0.16	4.0- 5.0
.,.			1	1	.0043		. 0063	, , , , ,	1	.0100	. 0127	.0128	0.16	5,0- 6.0
6.0-7.0		. 0005	.0015	.0030	.0041	. 0057	.0068	.0081	. 0092	.0110	.0155	.0156	0.16	6.0- 7.0
7.0-8.0		. 0002	.0013	.0030	.0040	. 0055	. 0063	. DDBO	0096	.0115	.0157	. 0158	0.16	7.0-8.0
8.0- 9.0		. 0005	.0013	.0030	. 0040	. 0059	. 0069	.0081	. 0092	.0107	.0139	. 0140	0.16	8.0- 9.0
9.0-10.0	- ,	. 0005	.0016	. 0033	.0044	. 0061	. 0072	.0086	.0100	.0119	.0161	. 0162	0.16	9.0-10.0
10.0-11.0		. 0005	.0015	.0037	. 0050	.0066	. 0075	.0090	.0110	.0119	. 0272	. 0273	0.16	10.0-11.0
11.0-12.0		. 0005	.0014	.0033	. 0043	. 0059	.0069	. 0087	.0111	. 0139	. 0250	. 0251	0.16	11.0-12.0
12.0-13.0		. 0005	.0019	. 0034	. 0046	. 0062	.0072	. 0089	.0107	. 0131	.0198	. 0199	0.16	12.0-13.0
13.0-14.0		. 0005	.0019	.0040	. 0053	. 0070	.0080	.0098	.0119	. 0140	.0193	. 0194	0.16	13.0-14.0
14.0-15.0		.0010	. 0023	.0048	.0062	.0088	. 0100	,0114	.0131	.0146	.0354	. 0355	0.16	14.0-15.0
15.0-16.0		. 0009	. 0021	.0050	. 0062	.0079	. 0090	.0108	.0119	. 0137	. 0213	. 0214	0.16	15.0-16.0
16.0-17.0	. 0003	. 0009	. 0023	.0048	. 0058	.0079	. 0091	.0108	. 0125	.0137	.0152	. 0152	0.32	16.0-17.0
17.0-18.0	. 0001	. 0007	. 0021	. 0040	.0049	. 0065	. 0075	.0086	.0102	.0121	.0166	. 0167	0.16	17.0-18.0
18.0-19.0	+	. 0006	. 0014	. 0032	0042	0058	. 0064	. 0073	.0081	. 0092	.0118	.0119	0.16	18.0-19.0
19.0-20.0		. 0006	. 0014	. 0030	. 0039	. 0049	. 0054	. 0064	.0074	.0087	.0113	.0114	0.16	19.0-20.0
20.0-21.0	İ	. 0001	. 0011	. 0027	. 0033	.0045	. 0051	. 0059	.0068	. 0090	.0134	. 0135	0.16	20.0-21.0
21.0-22.0		. 0001	.0010	0023	.0031	.0041	. 0049	. 0055	. 0064	.0071	. 0121	. 0122	0.16	21.0-22.0
22.0-23.0			. 0010	. 0022	.0030	.0040	. 0047	. 0056	. 0068	. 0070	.0081	. 00BZ	0.16	22.0-23.0
23.0-24.0			.0010	. 0021	. 00 30	.0040	. 0045	. 005 1	.0060	. 006В	. 0097	0098	0.16	23, 0-24.0
24.0-25.0	1		.0010	. 0022	. 0029	. 0039	.0042	. 0051	. 0065	. 0076	.0101	.0102	0.16	24, 0-25.0
25.0-26.0			.0011	. 0023	. 0033	.0041	.0045	.0059	.0071	.0080	. 0100	.0101	0.16	25.0-26.0
26.0-27.0			.0010	. 0024	. 0032	. 0043	. 0050	. 0060	.0070	. 0082	. 0282	. 0283	0 16	26,0-27.0
MOTE: (I) Wh		L		m shear ave	anded 2 28 a		L		<u> </u>		<u> </u>	L		L

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE '	VIII-9 1	STRIBUTIO	ON OF VECT	OR WIND SI	IEARS					R WIND S	
STATION:			SANTA MON	ICA, CALIF	ORNIA							SANTA MO	IIGA. CA	LIFORNIA
	CE PERIOD		AUGUST											
STATION	ELEVATION	I: .	125 feet or	H.I meter∗	MSI						L	A	GUST	
STATION (COGRDINAT	ES:	31.01 deg N	. 11+ 27 dec	/V									
PERIOD O	F OBSERVA	TION:	fang Beach,										<u>.</u>	
			Santa Monico			1956- Decem	ber 11, 196a		.	· · · · · · · · · · · · · · · · · · ·				
DATA SOU	PCE:		Vational West	er Dureau					,			NO, OF ORS	620 620	ACH LEVEL
PREPARE	D BY:		Asheville, National Aca	mantics and	ia I Space Adm	mistration						1	ti*IITS:	
			National Acr Marshall Sp Acrophysics February 23	ice Flight C and Astroph , 1963	enter, Acrol sysics Branc	h, thuts it	ініоп е, Атабаніа					invers	ie seconil	(wec-1)
Vit Layer					MULATIVE	PERCENTA	GE ETŒQUE	NCY				Maximum	Pet.	Alt. Layer
(MSL) Fm	0, 135	2, 2)	15.9	5 0 a	64.0	84.1	90 a	95.0	27.72	99.0	99.165	'ihear	Freq.	(MSL) km
sfc- 1.0	·	.0008	. 8020	.0036	.0047	.0059	. 0066	. 0075	.0083	.0100	. 0106	.0106	0.32	ofc- 1.0
1.0-72.0		. 0004	. 0020	. 0039	. 0053	. 0067	.0076	. 0090	.0101	. 0115	. 0153	.0154	0.16	1.0- 2.0
z, 0- 3, 0		. 0005	.0017	. 0034	.0045	.0059	. 0065	1800.	.0093	. 0102	. 0136	.0137	0.16	2.0- 3.0
3.0- 4,0		. 0002	.0014	. 0031	.0040	. 0055	.0062	. 0071	.0084	. 0098	. 0134	. 01 35	0.16	3.0-4.0
4.0- 5.0		. 000 3	.0014	. 0030	.0040	. 0049	.0056	. 0065	.0077	. 0084	0101	.0102	0.16	4.0- 5.0
5.0- 6.0	. 0001	. 0005	.0014	. 0030	.0040	.0050	.0059	.0069	.0081	. 0092	0255	. 0256	0.16	6.0- 7.0
6.0- 7.0 7.0- 8.0	. 0001	. 0003	.0012	. 0029	.0037	.0052	.0058	.0070	.0083	.0092	.0116	0117	0.16	7.0-8.0
8.0- 9.0		. 0003	.0015	. 00 32	,0043	.0060	.0069	.0080	.0098	.0111	.0143	.0144	0.16	8.0- 9.0
9. 0-10. D		. 0004	.0015	. 0034	.0046	. 0062	. 0070	.0085	.0098	.0112	.0140	. 0141	0.16	9.0-10.0
0.0-11.0		, 0003	.0018	. 0017	.0050	. 0062	. 0077	. 0097	.0113	. 0137	.0210	. 0211	0.16	10.0-11.0
1.0-12.0		. 0006	.0017	. 0035	.0049	.0071	. 0082	.0100	.0117	. 0142	.0192	.0193	0.16	11.0-12.0
2 0-13.0		. 0006	. 0017	. 0035	.0048	.0064	. 0073	.0090	.0108	.0144	. 0291	. 0292	0.16	12, 0-13.0
3.0-14.0		. 0007	.0020	.0043	.0060	.0081	. 0092	.0112	. 0137	.0148	.0271	. 0272	0.16	13.0-14.0
4.0-15.0		. 0009	. 0022	. 0049	.0063	.0088	.0100	. 0112	.0140	.0155	. 0 3 7 9	. 0380	0.16	14.0-15.0
5.0-16.0		. 0009	.0024	. 0049	. 0061	.0080	.0091	, 0103	.0123	.0146	.0289	. 0290	0.16	15.0-16.0
6.0-17.0		.0006	. 0021	.0048	. 0061	.0080	.0093	. 0106	.0122	. 0137	0195	.0196	0.16	16.0-17.0
7.0-18.0		. 0005	.0019	. 0037	.0049	.0064	.0074	. 0091	.0113	.0126	.0169	.0170	0.16	17.0-15.0
8.0-19.0		.0004	,0015	.0031	.0041	0056	.0063	. 0076	.0096	.0132	.0153	.0154	0.16	18.0-19.0
9.0-20.0		.0002	.0013	. 0028 . 0028	.0037	.0049	.0054	. 0064	.0075	.0081	.0145	.0146	0.16	20.0-21.0
11.0-22.0	,	.0001	.0012	.0028	0033	.0043	.0049	.0060	.0070	.0080	.0099	.0100	0.16	21.0-22.0
2.0-23.0		0002	.0010	.0023	.0031	.0041	.0047	.0052	.0061	.0070	.0197	.0198	0.16	22.0-23.0
3.0-24.0			.0010	.0023	.0031	.0040	. 0045	,0053	.0062	.0067	.0243	.0244	0.16	23.0-24.0
4.0-25.0			.0010	. 0021	0029	.0039	. 0042	. 0051	. 0060	. 0069	.0089	. 0090	0.16	24.0-25.0
5.0-26.0			.0010	. 0020	. 0028	.0039	. 0042	. 0053	. 0061	, 0075	.0120	.0121	0,16	25.0-26.0
6.0-27.0			.0010	. 0021	. 00 30	.0040	.0044	. 0051	. 0061	. 0078	.0126	.0127	0.16	26.0-27.0
							l				1			Í

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE '	/III-10 E	DISTRIBUTIO	N OF VECT	OR WIND SH	EARS		-			R WIND S	
STATION:			SANTA MON	ICA, CALIF	ORNIA					-				
REFEREN	CE PERIOD	lt.	SEPTEMBER									SANTA MON	iica, ca	LIFORNIA
STATION I	ELEVATION	t:	125 feet or 1	8.1 meters	MSL	_					٠ [SEF	TEMBER	
STATION	COORDINAT	ES:	34.01 deg N.	. 118.27 deg	w									
PERIOD O	F OBSERVA	TION:	Long Beach, Santa Monice	California , California	January 1, 1 April 15, 1	1956-April 1 1956-Decemi	7, 1956 bar 31, 1960			-				· · · · · ·
DATA SOU	RCE:		National West U. S. Weath Asheville, N	er Bureau	•							NO. OF OBS	600	CH LEVEL:
PREPARE	D BY:		National Aer Marshall Spi Aerophysics February 23	onautics and ice Flight C and Astroph	Space Admi	nistration allistics Div h, Huntsville	islon , Alabama		·			invers	UNITS:	(sec-1)
Att. James			reditary 23									Maximum	Pet.	Alt. Layer
Ait. Layer (MSL)	0 125	2, 28	15.9	50.0	MULATIVE 68.0		90.0	95. 0	97.72	99.0	99.865	Shear	Freq.	(MSL)
· km	0.135	Z. 28	15.9	30.0	DB. U	84.1	70.0	yp. U						
sfc- 1.0		0009	. 001B	. 0035	. 0047	. 0060	. 0068	.0076	. 0083	.0096	.0119	. 01 20	0,17	afc- 1.0
1.0- 2.0	. 0001,	.0010	. 0022	. 0042	. 0059	,0071	.0082	.0097	.0106	.0124	.0199	. 0200	0,17	1.0 - 2.0
2.0- 3.0	.0001	. 0006	.0018	. 0039	. 0051	.0068	. 0079	. 0090	. 0103	.0116	.0194	. 0195	0, 17	2.0- 3.0
3.0- 4.0		. 0005	.0016	.0034	.0048	0063	. 0075	.0090	.0110	.0120	.0189	. 0190	0.17	3,0-, 4.0
4,0-15.0		. 0009	.0016	, 0035	.0044	. 0059	.0068	. 0079	. 0091	.0114	.0168	.0169	0.17	4.0- 5.0
5.0- 6.0		, 6007	. 0016	.0033	. 0043	. 0059	. 0068	.0078	.0091	.0111	.0142	.0143	0,17	5.0- 6.0
6.0- 7.0		.0004	.0017	. 0035	. 0045	. 0060	.0069	.0085	.0098	,0118	.0151	. 0152	0.17	6.0- 7.0
7.0- 8.0		. 0005	. 0016	. 0034	. 0050	.0064	. 0075	.0095	.0123	,0158	.0194	.0195	0.17	7.0- 8.0
8.0- 9.0		.0003	, 0017	.0038	.0050	.0066	. 0076	.0089	.0109	.0137	,0190	.0191	0.17	8.6- 9.0
9.0-10.0		. 0007	. 0020	. 0040	.0054	. 0070	.0083	.0101	. 0120	. 0143	.0241	. 0242	0, 17	9.0-10.0
10.0-11.0		.0006	. 0020	. 0040	.0056	. 0077	, 0089	.0101	. 0120	.0154	.0209	.0210	0, 17	10,0-11,0
11.0-12.0		.0007	. 0020	.0042	.0060	.0080	. 0099	.0123	.0160	.0180	. 0257	. 0258	0.17	11.0-12.0
12.0-13.0		. 0007	. 0020	.0042	. 0059	. 008Z	.0100	.0120	0137	.0159	. 0302	. 0303	0, 17	12,0-13.0
13.0-14.0		. 0008	. 00 20	. 0045	.0061	.0085	. 0098	.0114	.0145	.0176	. 0239	.0240	0.17	13.0-14.0
14.0-15.0		, 0007	. 00Z0	. 0045	. 0063	, 0086	. 0099	.0119	.0149	.0185	. 0226	. 0 2 2 7	0.17	14.0-15.0
15.0-16.0	0002	. 0010	. 0023	. 0053	.0069	. 0091	. 0102	.0120	.0139	.0152	.0193	.0194	0, 17	15.0-16.0
16.0-17.0		. 0009	. 0025	. 0051	.0068	. 0086	. 0095	.0114	.0139	. 0164	.0229	. 0230	0, 17	16.0-17.0
17.0-18.0		.0004	. 0022	. 0043	. 0058	. 0073	. 0084	.0103	. 0122	. 0164	.0188	. 0189	0.17	17.0-18.0
18.0-19.0		. 0003	. 0015	. 0033	. 0042	. 0057	. 0066	. 0079	. 0096	.0113	.0172	. 0173	0, 17	18.0-19.0
19.0-20.0		. 000 z	.0011	. 0027	. 0038	.0051	. 0059	. 0076	. 0090	. 0119	. 0230	. 0231	0,17	19.0-20.0
20,0-21.0		. 0001	.0011	. 0024	.0034	, 0048	. 0053	. 0063	.0087	. 0109	. 0123	.0124	0, 17	20.0-21.0
21,0-22.0		., 0001	. 0010	. 0022	, 0031	. 00 42	. 00 48	. 0058	. 0072	.0088	.0169	. 0170	0.17	21.0-22.0
22.0-23.0		. 0001	. 0010	. 0022	. 0030	. 00 40	, 0044	.0055	. 0070	. 0079	.0111	.0112	0.17	22.0-23.0
23,0-24.0			. 0009	. 0020	.0029	.0038	. 0041	.0051	. 0063	. 0101	.0158	. 0159	0.17	23.0-24.0
24.0-25.0			. 0009	. 0020	. 0027	.0034	, 00 41	. 0050	. 0060	. 0074	. 0 206	. 0207	0.17	24.0-25.0
25, 0 - 26, 0			. 0009	, 0020	.0028	. 0036	. 0041	. 0052	. 0060	. 0069	.0135	. 0136	0.17	25.0-26.0
26.0-27.0			. 0009	. 0019	. 0025	. 0036	.0041	. 0051	. 0065	. 0083	.0209	. 0210	0.17	26.0-27.0
		<u> </u>	<u></u>											

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency was not determined.

7 - 7			TABLE V	111-ji Di	STRIBUTION	OF VECT	na wydd Haf	ARS .					RIBUTIO	
TATION:	E PERIOD		SANTA MONI	CA, CALIFU	RNIA				1.51			SANTA MON	ICA, CAI	LIFORNIA
	LEVATION		125 feet or 31		451,							00	TOBER	
TATION C	COORDINAT	ES:	34.01 deg N.	118.27 deg	w		- · · · ·	77						
PERIOD OI	F OBSERVA	TION:	Long Beach, Sente Monice	California J , California	April 16, 8	956-April P 956-Decend	7, 1954 her 31, 1960	* +-				~		:
DATA SOU	RCE:		National Wea U. S. Weathe	r Bureau							.,	NO. OF OBS	. FOR EA	CH LEVE
PREPARE	n 87		Asheville, Ne National Ass	orth Carolina onautice and	Space Admil	nia tradion							UNITS:	
			National Agramati Spa Aurophysics February 23.	ce Flight Ce and Astrophy 1962	nier, Aurpb ruice Branci	. Henter Mi	, Alabama						a second	_
t. Layer				CUI	AULATIVE I	PERCENTA	E PREUBEI	CY				Marimum Sheez	l'et. Fraq.	Alt. Loy (MSL)
(MSL)	0.135	2. 28	15.9	50.0	68.0	84.3	90.9	95. 0	91.72	37.5	99.165			<u>km</u>
efc- 1.0	. 0004	.0009	>,00Z0	, 00 40	. 0051	, 0066	.0673	. ****	. 9362	. 6126	.6161	.6)62	0.16	ste- 1
1.0- 2.0		.0009	.0020	. 00 42	. 0054	,0074	.0085	. 0070	, 6100	.0119	. 6159	. 0160	0, 16	1.8- 2
2.0- 3.0		.0007	.0019	.0040	. 0050	, 0,069	.0077	. 9691	. 9109	.0130	. 6203	. 0264	9.16	2,8- 1
3.0- 4.0		.0007	.0019	. 0039	.0052	.0074	.0086	. 6161	. 0118	.0131	. 0205	. 0256	0.16	3.0
4.0- 5.0		,0004	.0017	.0034	. 00 48	.0064	.0080	, 8100	. 0125	. 0159	. 0355	. 0354	9, 16	4,0- 1
5.0- 6,0		, 6007	.0017	. 0033	. 00 45	.0061	.0075	, 0094	.0116	.0154	. 0339	.0340	0.16	8.0-
6.0- 7.0		. 0005	.0017	. 0035	, 00 46	. 0065	.0080	,0054	.0113	. 91 42	, 9367	. 0386	0,16	, 6,0-
7.0- 8.0		.0004	. 0016	. 0035	. 0049	. 9067	.0079	. 0095	.0117	.0157	.0311	.0312	9, 16	7.0-1
8.0- 9.0		. 0004	.0018	.0038	, 0051	. 0075	.0090	.0117	.9140	. 0157	, 6361	. 6762	0.16	8.0-
9.0-10.0		, 0007	0018	.,0040	, 0054	,0079	.0073	.0110	.0134	. 8155	. 0295	.0296	0,16	9,0-11
0.0-11.0		, 0007	.0019	. 0042	,0058	.0083	.0097	, 012 1	. 8147	, 8196	. 0295	. 0296	8.16	10.0-1
1,0-12,0		. 0005	. 0020	. 0045	, 606)	0085	.0077	.0122	. 0143	. 010,1	. 0241	. 0242	0.16	, 11.0-1
2,0-13.0		.0009	.0021	.0048	. 0068	. 9027	.0102	.0136	. 8152	. 03 20	, 026-5	.0361	0.16	12.0-1
3.0-14.0		.0005	. 0020	.0544	. 0062	.0085	.0192	, 0128	. 0155	. 0183	. 0291	. 0292	0.16	13.0-1
4.0-15.0		.0007	. 9019	,0039	, 0053	.0073	. 9987	. 0107	, 0124	. 0) 40	. 0230	. 6231	6, 16	14.0-1
15.0-16.0		, 6009	.0018	.0038	. 0052	. 0070	.0063	. 8094	. 0120	0136	.0179	.0100	0.16	15.0-1
16.0-17.0		0009	,0019	, 90 40	0051	.0071	,0842	. 0099	.0118	, 6136	.0238	. 9239	0.16	16.0-1
7.0-18.0		.0004	. 0020	.0040	0950	.0048	.0071	. 0007	, 0104	.0132	.0106	,0107,	0.16	17,0-1
8,0-19.0		0005	.0017	, 9033	, 6043	. 0055	.0064	. 0076	, 9673	.0112	. 6198	, 8199	0.16	, 18.0-1
9.0-20.0	•	. 0001	.0010	.0028	, 9038	0052	.0060	. 0070	, 0587	.0103	.6329	. 0321	0, 16	19.0-2
20.0-21.0		.0001	. 9010	, 0023	. 6032	. 00 47	. 5058	. 0070	.0079	0113	.0196	0197	0.14	
11.0-22.0		. 900 2	.0010	.0022	, 0033	. 0045	0053	.0061	.0072	, 0000	,0114	.0115	0, 16	21.0-2
22.0-23,0	1	10001	.0019	,0023	.0931	.0046	,0053~	. 0045	. 9978	. 0006	,6137	.0138	0, 16	23.0-2
23. 6-24. 0	Ì	. 0063	.0010	.0022	.0032	.0043	,0050	, 0040	, 9572	.0086	, 0145	.0146	-,	1
24.0-25,0	t		. 0010	. 0022	, 6030	.0043	. 9050	. 004.0	.0069	.0085	,0110	.9111	0, 16	24.0-2
25.0-26.0	ł		. 0009	.0021#	. 0031	, 0043	, 9051	. 9042	. 0000	.0100	.0148	. 0149	0.16	25.0-
24.0-27.0		1	, 0009	. 0021	,0030	. 00 4Z	. 0051	, 0062	.0673	.0085	.0121	.0122	0.16	26.0-2

NOTE: (1) When the percent frequency of minimum shear exceeded 5.28 and/or 0.135 cumulative percentage frequency, the chear associated with the cumulative percentage frequency associated with the cumulative percentage frequency.

			TABLE \	/III-12 D	ISTRIBUTIO	N OF VECTO	OR WIND SH	EAR5					R WIND S PRIBUTIO	
STATION:		•	SANTA MON	ICA, CALIF	ORNIA							SANTA MON	VICA, CA	LIFORNIA
	CE PERIOD:		NOVEMBER 125 feet or 3	• 1	1461									· · · · · · · · · · · · · · · · · · ·
STATION E	LEVATION	1	125 leet or 3	6.1 Meters	MSL						L	NOV	ember	
STATION C	COORDINAT	ES:	34.01 deg N,	118.27 deg	w									
PERIOD OF	F OBSERVA	TION:	Long Beach, Santa Monice	California , California	January I, 1 April 16, 1	956-April 1' 956-Decemb	7, 1956 er 31, 1960							
DATA SOU	RCE:		National Wes	ther Record	e Center							NO. OF ORS	, FOR E	ACH LEVEL
			U. S. Weath Asheville, N	er Bureau Jorth Carolin									600	
PREPARE	D BY:		National Aer Marshall Spa Aerophysics	onautics and	Space Admi enter, Aerob	nistration allistics Div	islon						UNITS:	
			Aerophysics February 23	and Astroph	ysics Branci	s, Huntsville	, Alabama				2	invere	e second	(*ec ⁻¹)
Alt. Layer				CU	MULATIVE	PERCENTAC	E FREQUE	NCY				Maximum Shear	Pet. Freq.	Alt. Taye: (MSL)
(MSL) km	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	3HeA7	. , eq.	km
øfc- 1,€		. 0005	. 0020	.0041	. 0052	.0068	. 0081	.0092	.0121	.0134	. 0238	. 0239	0.17	sfc- 1.0
1,0- 2,0		. 0005	.0019	.0040	. 0053	.0069	. 0081	.0101	.0118	. 0130	. 0151	.0152	0,17	1,0- 2.0
2,0- 3.0		. 0009	. 0020	.0040	. 0055	. 0075	.0088	. 0105	.0132	. 0159	. 0273	. 0274	0.17	2.0- 3.0
3.0- 4.0		. 0004	.0019	. 0036	. 00 49	. 0070	. 0085	.0113	.0133	. 0190	. 0306	. 0301	0.17	3.0- 4.0
4.0- 5.0		. 0008	.0018	. 0035	. 0049	, 0069	.0080	.0092	. 0121	. 0153	.0230	. 0231	0.17	4.0- 5.0
5.0- 6.0		. 0006	.0018	.0035	,0049	.0068	, 0083	.0097	.0117	. 0144	. 0356	.0357	0.17	5,0- 6.0
6.0- 7.0		. 0006	.0019	.0040	.0053	.0073	.0089	.0112	.0139	. 0161	.0226	0227	0.17	6.0- 7.0
7.0- 8.0		. 0005	.0017	. 0040	.0055	.0077	. 0090	.0121	. 0149	.0174	.0219	. 0220	0.17	7.0- 8.0
8.0- 9.0		. 0006	.0019	.0040	.0055	,0077	. 0090	0112	.0147	.0186	. 0333	.0334	0.17	8.0- 9.0
9,0-10.0		. 0005	.0020	0046	. 0063	. 0090	. 0105	. 0126	.0148	.0181	. 0357	. 0358	0.17	9.0-10.0
10.0-11.0		. 0005	. 0020	. 0045	. 006Z	.0090	. 0107	. 0132	.0150	.0189	,0247	. 0248	0.17	10.0-11.0
11.0-12.0	.0001	. 0009	. 00Z4	. 0049	. 0067	. 0092	.0107	. 0125	.0152	. 0161	. 0212	. 0213	0, 17	11.0-12.0
12.0-13.0		. 0009	. 0023	.0051	. 0070	.0101	. 0125	. 0145	.0173	. 0209	.0370	0371	0,17	12,0-13.0
13.0-14.0		. 0009	. 0021	.0046	.0061	. 0089	. 0103	. 0123	.0152	. 0176	.0291	0292	0.17	13,0-14.0
14.0-15.0		. 0009	. 0020	. 0043	. 0056	.0078	. 0093	. 0122	.0150	.0181	.0248	. 0249	0.17	14,0-15,0
15.0-16.0		. 0005	.0016	. 0040	. 0054	.0071	0083	.0102	.0131	. 0151	. 0200	0201	0.17	15.0-16.0
16.0-17.0		, 000 4	.0018	. 0040	. 0051	.0068	.0079	.0091	.0116	. 0150	.0199	. 0200	0.17	16.0-17.0
17.0-18.0		, 0009	. 0017	. 0036	. 0050	.0062	. 0070	.0082	. 0096	. 0112	.0175	. 0176	0.17	17,0-18.0
18.0-19.0		. 0005	. 0014	. 0030	. 0040	.0054	, 0063	0074	.0091	. 0138	. 0230	0231	0.17	18.0-19.0
19.0-20.0		. 000 Z	. 0011	. 0027	. 0037	, 0050	. 0059	.0074	.0088	. 0099	.0121	. 0122	0.17	19,0-20.0
20.0-21.0		. 0001	. 0010	. 0026	. 003Z	.00 45	. 0055	. 0069	. 0093	, 0108	.0166	. 0167	0.17	20.0-21.0
21,0-22.0		, 000 Z	.0010	. 0023	.003Z	. 0044	.0052	. 0071	,0088	.0128	. 0213	. 0214	0.17	21.0-22.0
22.0-23.0		. 000 Z	. 0011	.00Z4	.0034	, 00 48	. 0053	. 0063	. 0079	. 0100	.0155	. 0156	0, 17	22.0-23.0
23, 0 - 24, 0		. 000Z	.0011	. 0025	. 0035	. 00 49	0057	. 0069	.0081	.0104	. 0 206	. 0207	0.17	23, 0-24, 0
24.0-25.0		. 0001	. 0011	. 0027	.0039	. 0050	. 0057	. 0069	.0081	. 0102	. 0149	. 0150	0.17	24.0-25.0
25.0-26.0	,	. 0001	. 0010	. 0029	.0038	.0052	. 0061	. 0076	\$600	. 0109	.0213	. 0214	0, 17	25. 0-26. 1
26.0-27.0		ŀ	. 0012	. 0030	. 0040	.0054	.0062	. 0073	. 0085	.0098	.0150	. 0151	0.17	26.0-27.0
ľ	l		1			Ī	1			ĺ	1		1	1

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE	VIII- 13	DISTRIBUTI	ON OF VEC	TOR WIND S	НЕАЛЗ			ı		R WIND! TRIBUTE	
STATION:	·		FANTA MO	TICA, CALII	FORNIA									
	CE PERIO		DECEMBER									SANTA MO	NIGA, CA	1.11.OLNIV
STATION	ELEVATIO	N:	125 feet or	36. I metere	MSI.						1	I	ресемви	R
STATION	COORDINA	TES:	34,01 deg N	, 11H. 27 de	, w							-		
DEBIOD O	F OBSERV	A TICN.	Lana Basak	California	*	1064 4	12 1014							
LINIO	P (VB3EAV)	4110/41	Long Beach. Santa Monic	a, Californi	April 16,	1956-Decem	17, 1996 Omer 31, 196	(i						
DATA SOU	RCE:		National We U. S. Weath		le Center							NO, OF OR		ACH LEVI
PREPARE	0.89		Asheville, P	orth Caroli	na. d Europa Arlan	internation :						——	620	
CUELAR.	D B t :		National Ass Marshall Sp Assophysics	are Flight C	enter, Aero	ballistics Di	viston					1	UNITS:	
			February 23	1962								inver	se second	(sec - 1)
it. Layer (MSL)				CI.	MULATIVE	PERCENTA	GE FREQUE	NCY		,	· · · · · · · · · · · · · · · · · · ·	Maximum Shear	l'et. Fraq.	Alt. La (MSL)
kın	0.135	2.28	15.9	50.0	6F. 0	84.1	90.0	95. U	97.72	99.0	99.865			km
afc- 1.0	. 0001	.0008	. 00 ZO	,0044	.0058	.0073	.0083	.0100	.0115	. 0136	,0170	.0171	0, 16	ofc- i
1.0- 2.0	. 0001	. 0009	. 00 20	. 00 43	, 0059	. 0079	.0089	.0103	. 0125	.0150	,0193	.0194	0.16	1.0- 2
2.0- 3.0		. 0009	0020	, 00 40	. 0056	. 0075	. 0089	.0113	. 0150	.0174	. 0224	, 0225	0.16	Z, 0-
3,0- 4,0		. 0009	. 0020	. 00 40	,0053	,0074	.0088	.0102	.0145	, 0 20 1	. 0341	. 0342	0.16	3,0-
4.D- 5.0		.0005	, 0020	, 00 40	.0054	,0072	.0084	.0107	.0126	.0141	. 0301	. 0302	0.16	4.0-
5.0- 6.0		.0008	.0017	, 0037	. 0050	.0068	.0077	.0095	.0120	.0151	. 0263	. 0264	0.16	5.0-
6.0-7.0		.0007	. 00 20	. 0039	, 0053	. 0071	.0089	.0112	. 0150	.0168	.0247	.0248	0.16	6,0-
7.0- 8.0		,0004	,0019	. 00 40	. 0052	. 0072	, 0086	.0104	.0128	.0162	.0267	, 0268	0, 16	7,0-1
8,0- 9.0 9,0-10.u		.0008	, 0020	. 00 41	.0057	.0082	.0100	.0122	.0144	0170	. 0299	.0300	0.16	8.0- 9
9,0-10.0 0,0-11.0		. 0007	.0020	,0050	.0067	. 0094	.0111	, 0138	,0157	.0219	, 0308	.0309	0,16	9.0-10
.0-12.0		. 0009	.0029	. 0057	.0073	.0095	.0114	.0140	.0172	, 0206	.0339	, 0340	0.16	10,0-11
2.0-13.0		.0010	.0026	. 0059	. 0079	.0108	.0125	.0151	.0192	.0219	,0262	. 0263	0.16	11.0-12
3, 0-14, 0		,0007	.0025	. 0051	.0073	.0102	.0121	.0149	.0192	.0210	.0301	,0302	0.16	12.0-13
. 0 - 15, 0		.0009	0020	. 0045	.0060	,0084	.0101	.0121	.0141	.0210	.02/4	.0275	0, 16 0, 16	13.0-14
.0-16.0		,0008	.0020	. 0040	.0055	. 0071	. 0081	.0098	.0129	0150	.0215	.0216	0.16	15.0-16
.0-17.0		. 0009	.0021	. 00 41	. 8057	.0074	. 0085	.0098	.0127	.0161	.0238	.0239	0.16	16.0-17
7,0-18,0		. 0009	.0020	. 00 40	.0053	.0070	,0081	.0098	. 6120	0139	. 0214	.0215	0, 16	17.0-18.
1.0-19.0		. 0006	.0017	, 00 36	. 00 49	. 0065	.0073	. 0088	.0110	.0135	,0187	.0188	0.16	18.0-19.
.0-20,0		. 0006	,0016	, 0033	. 0047	, 0060	. 0070	. 0081	. 0097	.0125	.0167	.0168	0.16	19.0-20.
1, 0 - 21, 0		1000,	.0010	, DO 2B	. 0039	. 0054	. 0062	. 0077	. 0088	.0114	. 0238	. 0239	0, 16	20,0-21.
.0-22.0		, 000 1	.0010	, 0027	. 0037	, 0052	. 0061	. 0075	. 0085	.0111	, 0169	.0170	0, 16	21.0-22.
.0-23.0		, 000 I	.0012	. 0026	. 0016	. 0050	,0057	. 0069	. 0079	. 0091	.0188	.0189	0, 16	22,0-23.
,0-24,0		. 0001	.0010	.0024	.0034	. 00 46	,0055	, 0069	. 6080	. 0090	. 0279	.0280	0.16	23.0-24,
.0-25.0			.0010	.0027	. 0037	, 00 49	. 0055	. 0069	1800.	.0108	. 0256	0257	0, 16	24.0-25.
. O - 26, D			.0010	. 0629	. 0040	.0053	. 0060	. 0070	.0086	,0110	. 0 20 5	. 0206	0, 16	25.0-26.
.0-27,0			.0011	. 0029	.0037	. 0050	. 0057	.0069	.0080	,0092	.0169	. 0 1 70	0, 16	26,0-27.
1			1						Ī			1	- 1	

NOTE: (1) When the percent frequency of minimum shear exceeded 2, 28 and/or 0, 135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

TABLE IX

Distribution of Zonal Wind Shears

Unit: Inverse second (\sec^{-1}) per 1000 meter layer of altitude Table IX-1 Annual 128 129 Table IX-2 January 130 Table IX-3 February Table IX-4 March 131 April 132 Table IX-5 Table IX-6 133 May June 134 Table IX-7 135 Table IX-8 July August 136 Table IX-9 137 September Table IX-10 Table IX-11 October 138 Table IX-12 November 139 Table IX-13 December 140

			TABLE I	C-1 DIS	TRIBUTION	OF ZONAL	WIND SHEAF	15					WIND SH RIBUTIO	
STATION:			SANTA MONI	CA, CALIFO	RNIA							SANTA MON	TCĀ, CA	LIFORNIA
REFERENC			ANNUAL	R I metera)	ASI.									
STATION E	LEVATION		tes teer or 1									AN	INUAL	
STATION C	OORDINAT	ES:	34.01 deg N.	118.27 deg	W									
PERIOD OF	OBSERVA	TION:	Long Beach, Santa Monica	California California	January i, i April 18, l	956-April 17 956-Decemb	7, 1956 er 31, 1960							
DATA SOU	RCE:		National Wea	ther Record	e Center				,			NO. OF OBS		CH LEVEL
			U. S. Weathe Asheville, N	orth Carolin	·							<u> </u>	7308 UNITS:	
PREPAREI	BY:		National Aer Marshall Spa	onautics and ce Flight Ce	Space Admi.	nistration allistics Div	laton Alabama						-	1.
			Aerophysics February 23,	1962	yaiça iltancı	n, munusvime	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					<u> </u>	e second	,
lt. Layer				CU	ULATIVE I	PERCENTAC	E FREQUE	VCY				Maximum Shear	Pct. Freq.	Alt. Laye (MSL)
(MSL) km	0.135	2.28	15.9	50.0	68.0	84.1	70.0	95. U	97.72	99.0	79.865			km
sfc- 1.0			.0006	. 0023	. 0035	. 0051	. 0060	. 0073	.0085	. 0101	.0135	. 0231	0.01	sfc- 1.
.Q- 2.0			.0008	. 0029	.0043	. 0062	.0075	.0090	.0103	.0123	.0170	. 0215	0.01	1.0- 2.
.0- 3.0			.0008	. 0027	.0040	. 0058	.0068	.0084	.0100	0122	.0179	. 0269	0.01	2.0- 3.
.0- 4.0			.0007	. 0024	.0036	. 0053	.0064	. 0080	.0100	.0121	.0197	. 0339	0.01	3.0- 4.
.0- 5.0			.0006	. 0023	. 0034	. 0051	. 0060	. 0076	. 0095	.0119	.0175	. 0 3 5 0	0.01	4.0- 5.
.0- 6.0			.0006	.0021	.0033	.0049	. 0059	. 0075	. 0095	. 0120	.0216	. 0283	0.01	5.0- 6.
.0- 7.0			.0006	.0021	.0033	. 0050	.0061	. 0078	. 0099	.0128	. 0236	. 0282	0.01	6.0- 7.
.0- 8.0		1	. 0006	. 0022	. 00 35	.0052	. 0063	.0081	. 0105	.0133	. 0206	. 0270	0.01	7.0- 8.
1.0- 9.0			. 0006	. 0023	. 0036	. 0056	. 0068	. DOB7	. 0109	. 0132	.0191	. 0302	0.01	8.0- 9
9.0-10.0			. 0007	. 0026	.0040	. 0061	. 0077	. 0099	. 0122	.0157	.0243	. 0297	0.01	9.0-10
0.0-11.0			. 0008	. 0028	, 0042	. 0064	. 0079	. 0102	.0131	.0164	.0263	. 0372,	0.01	10.0-11.
1.0-12.0			. 0008	. 0028	. 0042	. 0065	. 0079	. 0103	. 0129	.0151	.0226	. 0381	0.01	11.0-12
2.0-13.0			. 0008	. 0029	. 0044	. 0068	.0083	.0104	. 0132	.0159.	. 0239	. 0385	0.01	12.0-13.
3.0-14.0			.0008	. 0029	. 0044	. 0067	. 0083	.0104	. 0132	0161	. 0261	. 0344	0.01	13.0-14.
4.0-15.0			. 0009	. 0030	.0046	. 0067	.0081	.0100	. 0122	.0145	. 0200	. 0319	0.01	14.0-15.
5.0-16.0			. 0009	. 0031	.0047	. 0066	.0079	. 0098	.0115	.0138	.0177	. 0299	0.01	15.0-16.
6.0-17.0			.0010	.0034	.0049	. 0069	.0080	. 0096	.0117	. 0138	.0185	. 0254	0.01	16.0-17
7.0-18.0		. 0001	. 0010	. 0032	.0046	. 0063	.0074	. 0090	.0113	. 0133	.0181	. 0386	0.01	17.0-18
8.0-19.0			. 0009	. 0028	.0040	. 0057	. 0065	. 0080	. 0097	.0119	.0186	. 0216	0.01	18.0-19
9.0-20.0			. 0007	. 0022	.0032	, 0048	.0057	. 0070	.0087	.0106	.0176	. 0280	0.01	19.0-20
0.0-21.0			. 0005	.0018	. 0028	.0040	.0049	. 0061	. 0078	. 0092	.0152	. 0313	0.01	20.0-21
1.0-22.0			. 0003	.0016	. 0023	.0036	.0043	. 0055	. 0069	. 0085	.0143	.0197	0.01	21.0-22
2.0-23.0			. 0003	.0015	. 00ZZ	.0035	.0041	. 0052	. 0064	. 0078	.0127	. 0201	0.01	22.0-23
3.0-24.0		1	.0002	. 0015	. 0023	.0034	.0041	. 0051	. 0066	. 0083	. 0142	. 0233	0.01	23.0-24
4.0-25.0			. 0002	. 0016	. 0022	. 0034	.0041	. 0052	. 0064	.0079	.0118	. 0206	0.01	24.0-25
5.0-26.0		Ì	. 0002	. 0017	. 0024	. 0038	. 0045	.0058	. 0072	.0095	. 0142	. 0203	0.01	25.0-26
6.0-27.0			. 0002	. 0017	. 0025	.0037	. 0044	.0056	. 0069	. 0082	. 0152	. 0270	0.01	26.0-27
		1			ļ	1						I	1	

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

		, " - " - "	TABLE D	(-2 DIST	RIBUTION	of ZONAL V	VIND SHEAR	ıs					WIND SHI RIBUTIO	
STATION:	•		SANTA MONI	CA, CALIFO	RNIA							SANTA MON	ICA, CAI	JFORNIA.
REFERENC			JANUARY 125 feet or 3	l maters h	(51.									
STATION E	LEVATION	i	123 1661 0. 3.									JA	NUARY	
STATION C	COORDINAT	ES:	34.01 deg N,	118.27 deg	w									
PERIOD OF	OBSERVA	TION:	Long Beach, Santa Monica	California , California	April 18, 19	956-April 17 956-Decembe	, 1956 er 31, 1960		-					
DATA SOUL	RCE:		National Wea	r Bureau								NO. OF ORS	FOR EA	CH LEVEL:
PREPARET	D BY:		Asheville, N National Aer Marshall Spa Aerophysics	onautics and ce Flight Ce and Astrophy	Space Admin nter, Aeroba reice Branch	istralion Ilistics Divi , Tiuntsville	ніол , Alabams					invers	UNITS:	(sec ^{- 1})
			February 23.	1902	ULATIVE F			VC V				Maximum	Pct.	Alt. Layer
Alt. Layer (MSL)	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	99.865	Shear	Freq	(MSL) km
km sfc- 1.0	0.135	2.40	.0007	. 0023	. 0036	. 0051	.0062	. 0078	.0103	. 0120	. 0153	. 0154	0.16	sfc- 1.0
1.0- 2.0			. 0010	. 0034	. 0050	. 0073	. 0086	. 0100	.0119	. 0134	. 0203	. 0204	0.16	1.0- 2.0
2.0- 3.0		. 0001	.0012	.0041	. 0057	. 0077	. 0088	. 0107	.0125	.0139	. 0181	. 0182	0.16	2.0- 3.0
3.0- 4.0		. 0001	. 0009	. 0029	. 0045	. 0062	. 0076	. 0095	. 0121	. 0137	. 0279	. 0280	0.16	3.0- 4.0
4.0- 5.0			. 0009	. 0028	. 0044	.0062	. 0076	. 0098	.0120	. 0135	. 0265	. 0266	0.16	4.0- 5.0
5,0-6.0			.0007	. 0026	.0040	.0060	. 0070	. 0090	. 0129	. 0157	. 0224	. 0225	0.16	5.0- 6.0
6.0- 7.0			. 0009	. 0026	. 0043	. 0063	. 0075	. 0095	.0131	. 0165	. 0276	. 0277	0.16	6.0- 7.0
7.0- 8.0		· ·	. 0008	.0028	. 0043	. 0064	.0079	. 0101	.0133	. 0156	. 0232	. 0233	0.16	7.0- 8.0
B. O- 9. 0		ļ	. 0007	. 0030	. 0046	. 0069	. 0081	. 0105	. 0132	.0144	. 0225	. 0226	0.16	8.0- 9.0
9.0-10.0		.0001	. 0009	. 0030	.0047	. 0077	. 0092	.0119	. 0159	.0191	. 0276	. 0277	0.16	9.0-10.0
10.0-11.0		. 0001	. 0009	. 00 30	. 0049	. 0077	. 0092	.0112	. 0155	. 0242	. 0326	. 0327	0.16	10.0-11.0
11.0-IZ.0		ļ	.0010	. 0032	. 0049	.0076	. 0092	.0114	.0170	. 0205	. 0324	. 0325	0.16	11.0-12.0
12,0-13.0		. 0001	.0010	. 0033	. 005 t	. 0078	. 0094	. 0121	.0148	.0179	.0241	. 0242	0.16	12.0-13.0
13.0-14.0		. 0001	.0010	. 0036	. 0052	. 0078	. 0091	.0127	.0176	. 0209	.0271	. 0272	0.16	13.0-14.0
14.0-15.0		l	.0010	. 0035	. 0054	. 0082	. 0095	.0119	.0141	.0188	.0318	. 0319	0.16	14.0-15.0
15.0-16.0		1	. 0009	. 0033	. 0052	. 0079	. 0094	.0119	.0143	.0160	. 0245	. 0246	0.16	15.0-16.0
16.0-17.0		.0001	. 0010	. 0035	. 0052	, 0072	.0088	. 0107	.0123	. 0139	. 0206	. 0207	0.16	16.0-17.0
17.0-18.0			. 0011	. 0038	. 0055	. 0076	. 0090	.0119	.0137	.0159	. 0215	. 0216	0.16	17.0-18.0
18.0-19.0		.0001	. 0011	. 0035	. 0051	. 0070	. 0080	.0102	. 0128	.0181	. 0215	. 0216	0.16	18.0-19.0
19.0-20.0			.0008	.0028	. 0041	.0058	. 0068	.0093	. 0107	.0128	. 0157	.0158	0.16	19.0-20.0
20.0-21.0			. 0006	. 0021	.0031	. 0046	. 0055	.0070	. 0094	.0104	.0150	.0151	0.16	20.0-21.0
21.0-22.0			.0004	.0018	.0026	. 0039	. 0049	. 0062	. 0079	. 0099	.0128	, 0129	0.16	21.0-22.0
22.0-23.0			. 0005	.0018	. 0029	.0041	.0050	. 0060	.0082	. 0098	. 0200	. 0201	0.16	22.0-23.0
23,0-24.0			.0004	.0017	. 0025	. 0036	.0043	. 0055	.0074	. 0085	.0116	. 0117	0.16	23.0-24.0
24.0-25.0	l		. 0004	.0016	. 0025	. 0039	.0048	. 0057	. 0079	.0105	.0150	. 0151	0.16	24.0-25.0
25.0-26.0	i		. 0005	. 0019	. 0030	.0044	. 0055	. 0069	. 0090	.0110	.0146	. 0147	0.16	25.0-26.0
26.0-27.0			. 0005	.0019	. 0029	. 0041	.0051	.0062	.0071	.0080	. 0172	.0173	0.16	26. 0-27. 0
	l	1									L			

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage irequency.

exceeded was not determined.

			TABLE	IX-3 DI	STRIBUTIO	OF ZONAL	WIND SHEA	LR5					. WIND 51 TRIBUTE	
STATION:			SANTA MON	ICA, CALIF	ORNIA							SANTA MO	NICA. CA	LIFORNIA
	CE PERIOD ELEVATION		125 feet or	10 1	Met									
31 1100	ELEVATION.	•	125 leet or	Je. i meters	M 31.							F	EBRUAR	Y
STATION	COORDINAT	ES:	34.01 deg N	, IIB 27 de,	W									
PERIOD O	F OBSERVA	TION;	Long Beach Santa Monic	California a. Californi	January I. a. April 18,	1956-April 1956-Decem	17, 1956 her 11, 1960)						
DATA SOU	RCE		National We		de Center							NO, OF OB	S. FOR E.	ACH LEVE
			Asheville, North Carolina Asheville, North Carolina National Asronavilles and Space Administration Marshall Space Flight Center, Aerobalities Division Aerophysics and Astrophysics Branch, Iluntaville, Atalauna									↓	568	
PREPARE	D BY:		Marshall Sp	ronautice and are Flight C	d Space Adm enter, Aprol lugger Besse	inistration ballistics Di	inion					1	UNITS:	
			February 23, 1962								inver	se second	(sec ⁻¹)	
t. Layer ((MSL)			_	Çt	MULATIVE	PERCENTA	GE FREQUE	NCY				Maximum Shear	Pct. Freq.	Alt. Lay (MSL)
km	0.135							99. P65			km			
sfc- 1.0			. 0005	. 0024	. 0036	.0053	.0063	. 0077	.0092	.0112	.0155	.0156	0.18	efc- I
1.0- Z.0			. 0010	.0033	. 0047	.0070	.0083	. 0098	.0128	.0151	.0198	.0199	0,18	1.0- Z
2.0- 3,0		. 0001	.0010	. 0035	. 0050	. 0069	.0081	. 0096	. 0120	.0150	. 0268	. 0269	0.18	2.0- 3
3.0 - 4.D			.0008	. 0031	. 0045	.0068	.0083	. 0101	. 0126	.0147	.0195	.0196	0.18	3.0- 4
4.0- 5.0			.0008	. 0029	.0046	.0064	.0077	. 0095	. 0130	.0163	. 0231	. 0232	0.18	4.0- 5
5.0- 6.0			.0008	. 0029	. 0044	.0062	. 0082	.0101	. 0132	.0102	. 0232	. 0283	0.18	5.0- 6
6 0- 7.0			.0007	. 0027	.0042	.0063	.0076	. 0099	.0131	.0178	. 0256	. 0257	0.18	6.0- 7
7.0 8.0			. 0009	.0032	.0048	.0066	.0079	.0104	.0147	. 0198	.0269	. 0270	0.18	7.0- 8
8.0- 9.0			.0007	. 0030	.0048	. 0072	. 0092	.0114	.0138	. 0169	.0199	. 0200	0.18	8.0- 9
9.0-10.0			.0007	. 0029	. 0051	.0079	.0102	. 0126	.0158	.0180	. 0296	. 0297	0.18	9.0-10
0.0-11.0			. 0009	.0038	.0058	. 0094	.0113	. 0135	.0179	. 0208	. 0279	.0280	D. IB	10.0-11
1.0-IZ.0		.0001	.0011	.0041	.0060	.0085	.0106	.0132	. 0152	.0193	. 0271	. 0272	0.18	11.0-12
2.0-13.0			.0011	.0038	. 0062	.0094	.0112	.0134	.0149	.0191	.0384	. 0385	0.18	12.0-13
3.0-14.0		. 0001	.0012	.0038	. 0060	.0089	.0107	.0132	.0149	.0181	. 0290	. 0291	0.18	13.0-14
4.0-15.0		. 00012	.0011	.0037	.0056	.0084	.0099	. 0125	.0148	.0176	. 0252	. 0253	0.18	14.0-15
5.0-16.0			.0010	.0037	. 0057	.0085	.0106	.0123	. 0145	.0157	. 0298	. 0299	0.18	15.0-16
6.0-17.0		. 0001	.0011	. 0039	. 0057	. 0078	.0088	. 0114	.0138	.0169	. 0207	. 0208	0.18	16.0-17
7.0-18,0		.0001	.0015	.0039	. 0055	. 0079	.0091	. 0112	.0151	.0171	. 0227	. 022B	0.18	17.0-18
8.0-19.0			.0011	.0038	. 0049	. 0066	. 0079	. 0096	.0116	.0132	.0179	. 0180	0.18	18.0-19
9.0-20.0			. 0008	. 0028	.0041	. 0060	. 0073	.0086	.0111	.0127	.0176	. 0177	0.18	19.0-20
0.0-21.0			.0007	. 0022	. 0035	.0053	. 0064	.0078	.0101	.0159	. 0312	.0313	0.18	20.0-21
1.0-22.0	1		.0005	. 0018	. 0030	.0045	. 0051	. 0067	.0083	. 0090	.0172	. 0173	0.18	21.0-22
2.0-23.0	1		.0003	. 0015	. 0024	.0036	. 0042	. 0056	.0074	. 0083	.0146	.0147	0.18	22.0-23
3.0-24.0	ļ		.0004	.0016	. 0026	. 0037	. 0045	. 0057	. 0079	. 0102	.0178	.0179	0.18	23.0-24
1.0-25.0	1		.0003	. 0015	. 0025	. 0039	.0047	. 0056	.0072	. 0087	.0108	. 0109	0.18	24.0-25
5.0-26.0			. 0005	. 0019	. 0029	. 0046	. 0056	. 0074	.0096	.0111	.0152	. 0153	0.18	25.0-2b
5.0-27.0			. 0004	. 0019	. 0028	.0041	. 0050	. 0070	.0087	. 0111	.0178	. 0179	0.18	26.0-27
•	ŀ													

NOTE: (1) When the percent frequency of minimum shear exceeded 2,28 and/or 0,135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE D	K-4 DIS	TRIBUTION	OF ZONAL	WIND SHEAT	RS					WIND SH	
STATION:			SANTA MON	CA, CALIFO	DRNIA						ı	SANTA MON	IICA, CAI	LIFORNIA
REFERENC			MARCH											
STATION E	LEVATION:		125 feet or 3	F. i meters h	481							N	ARCH	
STATION C	OORDINAT	ES:	34.01 deg N.	118.27 deg	W									
PERIOD OF	OBSERVA	TION:	Long Beach, Santa Monica	California California	January 1, 1 April 18, 1	956-April 17 956-Decemb	, 1956 er 31, 1960			·				
DATA SOUR	CE:		National Wea U. S. Weath Asheville, N	r Durezu								NO. OF OR	620	CH LEVEL
PREPARED	BY:		National Aer Marshall Spa Aerophysics February 23	onautics and ce Flight Ce and Astroph	Space Admin	nistration allistics Divi s. Huntsville	ston , Alabaina					inver	UNITS:	(sec ⁻¹)
Alt. Layer			. sornary 43.	CUMULATIVE PERCENTAGE FREQUENCY MAXIF									Pet.	Alt. Layer
(MSL)	0, 135	Z. 2F									99.1.65	Shear	Freq.	(MSL) km
km	3, 133	4.40	.0006	. 0023	.0034	,0051	. 0063	.0075	.0091	.0101	.0230	. 0231	0.16	efc- 1.0
sfc- 1.0			.0009	0023	.0047	,0069	. 0085	.0078	.0117	.0150	. 0214	. 0215	0.16	1.0- 2.0
1.0- 2.0 2.6- 3.0		. 0001	.0009	.0030	.0049	. 0068	. 0079	.0096	.0117	. 0129	. 0196	. 0197	0.16	Z.O- 3.0
3.0- 4.0		, 3001	.0009	.0028	. 0042	. 0059	. 0069	.0081	.0101	.0113	. 0175	. 0176	0.16	3.0- 4.0
4.0- 5.0	ļ		.0008	.0024	. 0036	. 0051	. 0061	.0076	. 0090	.0101	.0175	. 0176	0.16	4,0- 5.0
5.0- 6.0]		. 0007	.0023	. 0036	. 0054	. 0062	. 0074	. 0092	. 0105	. 0224	. 0225	0.16	5.0- 6.0
6.0- 7.0			.0006	.0020	. 0032	. 0052	. 0063	, 0077	. 0099	. 0133	.0234	. 0235	0.16	6.0- 7.0
7.0- 8.0			. 0007	. 0025	. 0039	.0059	.0071	.0088	.0112	.0139	.0198	. 0199	0.16	7.0- 8.0
8.0~ 9.0			. 0007	.0028	. 0040	.0062	.0078	. 0102	. 0132	.0165	. 0301	. 0 3 0 2	0.16	8,0- 9.0
9.0-10.0			. 0009	. 0033	. 0050	. 0084	.0112	. 0153	. 0200	. 0233	. 0295	. 0296	0.16	9.0-10.0
10.0-11.0		. 0001	. 0010	. 0037	. 0056	.0085	.0111	. 0154	.0181	.0221	. 0371	. 0372	0.16	10.0-11.0
11.0-12.0			.0010	. 0033	. 0048	.0078	. 0093	.0123	.0142	.0165	. 0242	. 0243	0.16	11.0-12.0
12.0-13.0			.0010	. 0034	.0054	.0078	. 0091	. 0118	.0160	.0184	. 0312	. 0313	0.16	12.0-13.0
13.0-14.0			. 0009	. 0031	,0049	. 0071	. 0088	. 0110	.0146	. 0190	. 0303	. 0304	0.16	13.0-14.0
14.0-15.0			. 0009	. 0031	.0047	. 0067	. 0079	.0102	.0119	.0140	.0170	. 0170	0.32	14.0-15.0
15.0-16.0			. 0009	. 0032	. 0047	. 0061	.0074	.0096	.0106	.0121	.0186	.0187	0.16	15.0-16.0
16.0-17.0			. 0009	. 0037	. 0050	. 0074	.0086	.0106	. 0125	. 0158	.0185	.0186	0.16	16.0-17.0
17.0-18.0		. 0001	.0013	. 0039	. 0051	. 0071	.0084	. 0099	.0119	.0130	.0221	. 0222	0.16	17.0-18.0
18.0-19.0		. 0001	.0014	, 0037	. 0051	. 0065	,0073	. 0087	.0101	.0122	.0192	. 0193	0.16	18.0-19.0
19.0-20.0			. 0010	. 0031	.0043	.0059	. 0069	. 0080	. 0092	.0111	.0170	.0171	0.16	19.0-20.0
20.0-21.0			. 0007	. 0023	. 0035	.0048	. 0058	. 0075	.0087	.0112	.0148	. 0149	0.16	20.0-21.0
21.0-22.0			.0004	,0018	.0027	.0040	.0049	. 0063	.0077	. 0096	.0168	.0169	0.16	21.0-22.0
22.0-23.0			. 0004	. 0017	.0023	.0038	. 0045	. 0056	. 0076	. 009Z	.0139	.0140	0.16	22,0-23.0
23.0-24.0			. 0004	. 0015	. 0023	. 0037	. 0045	. 0056	. 0065	.007Z	.0123	.0124	0.16	23.0-24.0
24.0-25.0			. 0006	. 0017	. 0026	. 0036	. 0044	. 0053	.0067	. 0079	.0111	.0112	0.16	24.0-25. J
25.0-26.0			. 0004	.0017	. 0023	. 0037	.0045	. 0055	. 0069	.0086	.0194	. 0195	0.16	25.0-26 0
26.0-27.0			. 0003	.0015	. 0022	. 0032	. 0041	. 0049	.0066	. 0080	.0146	.0147	0.16	26.0-27.0
		l					1	1	l			1	<u> </u>	<u> </u>

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

		TABLE	IX-5 DI	STRIBUTION	OF ZONAL	WIND SHEA	RS					WIND SI	
STATION:		SANTA MON	NICA, CALIF	OŖNIA							SANTA MOI	VICA, CA	LIFORNIA
	CE PERIOD:		38.1 meters	Men									
3171104 2	LLEVATION:	123 1241 01	Jo. I meters	MIST.						L		PRIL	
STATION	COORDINATES:	34.01 deg N	I, 118.27 de _i	W									
PERIOD OF	F OBSERVATION		, California a, California										
DATA SOU	RCE:	National We U. S. Weatl	ather Record	la Center					· · · · · · · · · · · · · · · · · · ·		NO, OF OBS		ACH LEVEL
		Asheville, I	North Carolin	18		,					ļ	600	
PREPARE	рвү:	National Ae Marshall Sp	ronautics and sace Flight C and Astroph	J Space Adm enter, Aerol	inistration hallistics Div	inion						UNIT'S:	
		February 2	3, 1962	Tynics Tranc	n, mantsvin	e, Kianama					Invers	e second	(Hec - 1)
it. Layer (MSL)			cu	MULATIVE	PERCENTA	GE FREQUE	NCY		,		Maximum Shear	Pct. Freq.	Alt. Laye (MSL)
km .	0.135 2	2F 15.9	50.0	6R. 0	84.1	90.0	95.0	97.72	99.0	97. F.65			km
sfc+ 1.0		. 0006	. 00ZZ	.0036	. 0053	. 0065	. 0078	. 0091	.0104	. 0135	. 0136	0.17	afc- 1.4
1.0- 2.0		.0010	. 0031	. 0047	. 0069	.0080	. 0096	.0110	.0134	. 0208	. 0209	0.17	1.0- 2.0
2.0= 3.0	.00	.0010	. 0029	. 0045	.0061	. 0069	.0085	.0100	.0126	.0214	. 0215	0.17	Z. 0- 3.
3.0- 4.0		.0007	. 0028	.0039	.0054	0062	.0079	.0104	.0130	.0198	.0199	0.17	3.0- 4.0
4 0 - 5,0		.0007	.0028	.0042	.0059	.0071	. 0083	.0109	.0131	.0156	.0157	0.17	4.0- 5.1
5.0- 6.0		.0007	.0024	.0038	.0054	. 0069	.0088	.0107	.0140	.0233	, 0234	0.17	5.0- 6.0
6 0- 7.0		.0008	.0024	. 0038	.0054	. 0065	.0080	.0110	.0144	.0281	.0282	0.17	6.0- 7.0
7.0- 8.0		. 0006	.0023	. 0038	.0057	. 0069	. 0100	.0123	. 0152	. 0205	. 0206	0.17	7.0- 8.0
H.O- 9.0		.0006	. 0026	.0040	.0059	. 0069	.0088	.0110	.0129	.0170	. 0171	0.17	8.0- 9.0
٥.0-10.0		.0008	.0028	. 0042	.0066	.0078	.0097	.0109	.0127	.0215	. 0216	0. 17	9.0-10.0
10.0-11.0		. 0007	. 0024	. 0039	.0059	. 0072	.0094	.0130	.0148	.0214	. 0215	0.17	10.0-11.
11.0-12.0		.0008	.0029	.0044	. 0064	.0079	.0097	.0114	.0143	.0253 .0258	. 0254	0.17	11.0-12.0
12.0-13.0 13.0-14.0		.0009	.0034	.0045	. 0072	.0089	.0110	.0155	.0172	.0343	. 0259 . 0344	0.17	12.0-13.0
4.0-14.0		.0009	. 0030	.0044	.0065	.0079	.0099	.0118	.01/2	.0168	.0169	0.17	14.0-15.0
5.0-16.0		. 0009	. 0029	.0039	.0058	. 0069	.0087	.0109	.0136	.0215	.0216	0.17	15. 0-16. 0
16.0-17.0		.0010	.0032	.0048	.0067	.0081	.0097	.0122	.0159	.0253	.0216	0.17	16.0-17.0
17.0217.0		.0012	, 0034	.0049	.0066	.0076	.0089	,0117	.0125	.0385	. 03B6	0.17	17.0-18.0
18.0-19.0	. 00		. 0032	.0046	.0061	.0071	, 0082	.0096	.0109	.0154	. 0155	0.17	18.0-19.0
9.0-20.0		. 0008	. 0025	.0034	.0047	. 0056	. 0069	.0087	. 0100	.0127	.0128	0.17	19.0-Z0.0
n.0-21.0		. 0006	.0020	.0031	.0047	.0054	. 0065	.0076	.0086	.0128	, 0129	0.17	20.0-21.0
1.0-22,0		. 0004	.0017	. 0025	.0042	. 0050	. 0069	.0085	. 0121	.0196	. 0197	0.17	21.0-22.0
22.0-23.0		. 0003	. 0015	. 0023	. 0037	. 0045	. 0057	. 0069	. 0088	. 0129	, 0130	0.17	22.0-23.0
23.0-24.0		. 0003	. 0014	.0022	. 0037	. 0044	. 0062	.0087	. 0109	.0143	. 0144	0.17	23.0-24.0
24.0-25.0		. 0003	.0014	. 0021	. 0034	. 0044	. 0057	. 0067	.0100	. 0139	.0140	0.17	24.0-25.0
25.0-26.0		. 0002	.0012	.0022	. 0036	. 0047	. 0059	.0081	. 0111	. 0139	.0140	0.17	25.0-26.0
26.0-27.0		. 0002	. 0014	. 0023	. 0039	. 0048	. 0063	.0087	.0111	. 0185	.0186	0, 17	26.0-27.0
	1		1	1	I	l		ł	I	I i			I

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE I	X-6 DIS	STRIBUTION	OF ZONAL	WIND SHEA	RS					WIND SH	
:NOITATE			SANTA MON	ICA, CALIF	ORNIA							SANTA MO	VICA, CA	LIFORNIA
	CE PERIOD		MAY 125 feet or 3	10 1	WE1									
STATION	LEVATION	'	123 1881 01 3	o, i meiais	W.312						L		YAY	
STATION	COORDINAT	ES:	34.01 deg N,	, 118.27 deg	W									
PERIOD O	F OBSERVÁ	TION:	Long Beach, Santa Monica											
DATA SOU	RCE:		National West U. S. Weath	er Burean								NO, OF OR	620	CH LEVEL:
PREPARE	D BY:		Asheville, N National Aer Marshall Spi Aerophysics	onquities and ace Flight Co and Astroph	ia I Space Admi enter, Aerob sysics Branc	nistration allistics Div h. Huntsville	laion , Alahama					Invers	UNITS:	(sec-1)
Alt. Layer		February 23, 1962 CUMULATIVE PERCENTAGE FREQUENCY Maximum								Pct.	Alt. Layer			
(MSL) km	0, 135	2. ZF	15.9	50.0	68.0	84. 1	90.0	95.0	97.72	99.0	97. P65	Shear	Freq.	(MSL) km
efc- 1.0	0.133		,0006	. 0026	,0038	. 0052	. 0061	. 0072	.0087	.0103	.0151	.0152	0.16	efc- 1.0
1.0- 2.0			. 0009	. 0031	. 0046	. 0067	.0077	.0089	.0104	. 0122	. 0155	. 0156	0.16	1.0- 2.0
Z. O- 3. O		.0001	. 0009	. 0029	.0041	. 0056	.0067	.0082	. 0094	. 0109	. 0157	. 0158	0.16	2.0- 3.0
3.0-4.0		.0001	. 0009	. 0026	.0039	. 0057	. 0071	,0082	.0100	.0115	.0204	. 0205	0.16	3.0- 4.0
4.0-5.0			. 0008	. 0024	.0035	. 0052	. 0064	. 0079	. 0097	.0121	.0198	.0199	0, 16	4.0- 5.0
5.0- 6.0			. 0008	. 0022	.0034	. 0050	. 0063	.0076	. 0093	.0113	. 0219	. 0220	0.16	5.0- 6.0
6.0- 7.0			. 0006	. 0020	.0031	. 0050	. 0062	. 0083	.0098	.0127	. 0227	. 0228	0.16	6.0- 7.0
7.0- 8.0			. 0006	. 0022	.0034	. 0050	. 0060	. 0072	.0089	.0111	.0191	.0192	0.16	7.0- 8.0
8.0- 9.0		.0001	. 0007	. 0021	.0035	. 0054	. 0068	.0083	. 0096	.0107	. 0200	, 0201	0.16	8.0- 9.0
9.0-10.0			. 0007	. 0025	.0041	. 0060	. 0070	.0089	.0117	.0140	.0184	. 0185	0.16	9.0-10.0
10.0-11.0		.0001	. 0009	. 0027	.0039	. 0059	. 0073	. 0095	.0130	. 0154	.0267	.0268	0.16	10.0-11.0
11.0-12.0			. 0006	. 0027	. 0040	. 0059	. 0071	. 0093	.0117	.0132	.0380	. 0381	0.16	11.0-12.0
12.0-13.0			. 0008	.0029	.0041	. 0063	. 0078	. 0098	.0117	. 0155	.0281	. 0282	0.16	12.0-13.0
13.0-14.0		1000	. 0009	. 0028	.0042	. 0066	.0083	.0102	.0122	.0142	.0287	.0288	0.16	13.0-14.0
14.0-15.0			. 0010	. 0031	. 0048	. 0068	.0081	. 0099	.0124	.0143	.0179	. 0180	0.16	14.0-15.0
15.0-16.0		.0001	.0011	. 0033	. 0048	. 0069	. 0083	.0100	.0120	. 0135	.0170	. 0171	0.16	15.0-16.0
16.0-17.0		.0001	. 0011	. 0036	. 0049	. 0068	. 0080	. 0095	.0111	. 0135	.0147	.0147	0.32	16.0-17.0
17.0-18.0		. 000Z	. 0014	. 0038	. 0049	. 0066	. 0076	. 0094	.0116	.0146	.0212	. 0213	0.16	17.0-18.0
18.0-19.0		.0001	.0011	. 0031	. 0047	. 0061	. 0073	.0088	.0114	.0131	.0190	.0191	0.16	18.0-19.0
19.0-20.0		.0001	. 0008	. 0024	. 0036	. 0053	. 0064	. 0090	.0115	.0183	. 0279	. 0280	0.16	19.0-20.0
20.0-21.0			. 0004	.0017	. 0025	. 0036	. 0047	. 0061	.0074	. 0086	.0125	.0126	0.16	20.0-21.0
21.0-22.0			. 0002	.0013	.0020	. 0030	. 0038	.0049	.0061	. 0074	.0195	. 0196	Q. 16	21.0-22,0
22.0-23.0			. 0003	.0013	.0020	. 0032	.0040	. 0052	.0062	. 0076	.0114	.0115	0.16	22.0-23.0
23.0-24.0			. 0001	. 0010	. 0019	. 0031	. 0039	. 0050	.0065	. 0079	.0141	. 0142	0.16	23.0-24.0
24.0-25.0			. 0002	.0012	.0019	. 0030	. 0037	.0047	. 0059	. 0069	.0105	.0106	0.16	24.0-2b.0
25.0-26.0			. 000Z	. 0011	.0019	. 0030	. 0038	. 0046	. 0059	. 0071	.0104	. 0105	0.16	25.0- 3 6.0
26.0-27.0			. 000Z	. 0011	0019	. 0031	. 0038	.0047	. 0057	. 0062	.0128	. 0129	0.16	26.0-21.0
		L							<u>. </u>		L	.		

NOTE: (1) When the percent frequency of minimum shear exceeded 2, 28 and/or 0, 135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE	IX-7 DI	STRIBUTION	OF ZONAL	, WIND SHE	ARS				ZONAI DIS	. WIND SI TRIBUTIO	HEAR ON
STATION:			SANTA MON	IICA, CALI	FORNIA							SANTA MO	NICA. CA	LIFORNIA
STATION E			JUNE 125 feet or								—			
SIATION	LEVATION	ı;	145 14et or	or, i metere	MSI.						L	J	UNE	
STATION (COORDINAT	ES:	34.01 deg N	. 118 27 de	ζ W									
PERIOD O	F OBSERVA	TION:	Long Beach, Santa Monic	California a. Californi	January I, a. April IF,	1956-April 1956-Decem	17, 1956 ber 11, 176	1						
DATA SOU	RCE:		National We		ds Center							NO, OF OR		ACH LEVE
			U. S. Weather Bureau Asheville, North Carolina National Assumption									ļ	600	
PREPARE	0.84:		National Aeronautics and Space Administration Marshall Space Flight Center, Aerobaltedics Division Aerophysics and Astrophysics Branch, Huntaville, Alabama										UNITS:	
	-		February 23, 1962									inver	se second	(+ec -
it. Layer (MSL)										Maximum Shear	Pct. Freq.	Alt. Lay (MSL)		
km	0,135	2.2F 15.9 50.0 68.0 F4.1 90.0 95.0 97.72 99.6 99.F65								99.865			km	
efc- 1.0			. 0005	.0023	. 00 34	. 0050	. 0061	. 0077	. 0087	.0100	.0107	.0108	0.17	efc- 1.
1.0- 2,0			.0008	. 00 10	. 0015	. 0064	.0075	. 0091	, 0102	.0109	. 0139	.0140	0.17	1.0- Z.
.0- 3.0		. 0001	.0008	.0026	. 0039	. 0056	.0067	. 0077	, 0088	. 0077	. 0129	. 0130	0, 17	2.0- 3.
3.0- 4.0			. 0007	.0023	.0033	.0049	.0057	.0069	.0078	. 0090	. 0113	.0114	0.17	3.0- 4.
1.0- 5.0		. 0001	.0006 .0019 .0030 .0043 .0053 .0065 .0080 .0092 .0103									.0104	0.17	4.0- 5.
.0- 6.0			. 0006	. 0020	.0030	.0042	. 0052	.0064	.0084	. 0094	. 0210	. 0211	0.17	5.0- 6.
5.0- 7.0			. 0005	.0018	.0028	.0039	. 0049	.0062	. 0075	. 0086	.0127	.0128	0.17	6.0- 7.
7.0- 8.0	-		. 0005	. 0020	. 0030	.0044	. 0052	.0061	.0074	0079	.0115	. 0116	0.17	7.0- 8.
3.0- 9.0			. 0005	.0019	.0029	.0041	. 0049	. 0063	.0068	. 0091	.0132	.0133	0.17	8.0- 9.
0.0-10.0			.0008	. 0023	. 0037	.0055	. 0068	.0081	.0098	.0121	. 0134	.0135	0, 17	9.0-10.
0.0-11.0			.0008	. 0026	.0036	. 0055	.0063	.0078	.0094	.0111	.0159	.0160	0.17	10.0-11.
1.0-12.0			.0006	. 0022	. 0035	. 0052	.0063	.0081	. 0099	.0115	.0141	.0142	0.17	11.0-12.
2.0-13.0			. 0007	. 0026	.0039	. 0056	.0071	.0086	.0101	.0112	.0210	. 0211	0.17	12.0-13.
3.0-14.0			. 0009	. 0030	.0044	.0064	.0077	. 0096	. 0121	.0139	0197	. 019В	0.17	13.0-14.
.0-15.0		. 0001	.0008	. 0030	.0048	. 0069	.0082	.0101	.0123	.0144	.0195	. 0196	0.17	14.0-15.
5.0-16.0		.0001	.0011	. 0026	.0052	. 0069	.0082	. 0096	.0110	.0131	.0177	. 0178	0.17	15.0-16.
5.0-17.0		. 0002	.0014	.0040	.0057	.0076	.0087	.0106	.0118	.0141	.0152	.0153	0.17	16.0-17.
7.0-18.0		. 000Z	.0014	. 0037	.0049	.0067	. 0075	. 0087	.0101	.0128	.0185	.0186	0.17	17.0-18.
1.0-19.0		1000.	.0010	. 0029	.0042	. 0056	.0063	. 0083	.0106	. 0126	.0193	.0194	0.17	18.0-19.
1.0-20.0			.0006	. 0021	. 0030	.0044	. 0052	. 0065	.0079	.0091	.0115	.0116	0.17	19.0-20.
0.0-21.0			.0006 .0018 .0026 .0037 .0042 .0053 .0070 .0078 .0125 .0									. 0126	0.17	20.0-21.
.0-22.0			.0002	. 0016	. 0022	. 0032	. 0039	.0044	. 0058	.0067	.0098	. 0099	0.17	21.0-22.
0-23.0			.0001	. 0011	.0020	. 0030	. 0038	.0047	. 0059	.0073	.0124	.0125	0.17	22.0-23.
. 0-24. 0			. 0001	.0010	. 0020	. 00 30	. 0035	. 0045	. 0059	. 00BZ	. 0232	. 0233	0.17	23.0-24,
, O- Z5. O			.0001	. 0011	. 0020	. 0029	. 0037	. 0049	. 0058	.0071	.0120	.0121	0.17	24.0-25.
.0-26.0			.0001	.0010	.0019	.0029	. 0033	. 0048	. 0056	. 0069	. 0100	.0101	0.17	25.0-24.
. 0-27.0			.0001	. 0011	. 0020	. 0030	. 0037	. 0046	.0055	. 0068	. 0073	.0074	0.17	26.0-27.
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NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE I	X-8 DIS	TRIBUTION	OF ZONAL	WIND SHEA	RS				ZONAL DIS	WIND SE	IEAR ON
STATION:			SANTA MON	ICA, CALIF	ORNIA							SANTA MON	NICA CA	LIFORNIA
REFERENC			JULY									MATA MOI	ion, on	LIF ORNIA
STATION E	LEVATION	I:	125 feet or 1	SF, 1 meters	MSI.								TULY	
STATION C	OORDINAT	ES:	34.01 deg N	. 118.27 deg	w									
PERIOD OF	OBSERVA	TION:				1956-April I 1956-Decemi								
DATA SOUR	RCE:		National Wes U. 5. Weath Asheville, N	er Burezu								NO, OF OBS	620	CH LEVEL:
PREPARED	э вү:		National Ass Marshall Sp Aerophysics	onautics and ace Flight C and Astropl	Space Admi enter, Aerob systes Branc	mistration allistics Div h, Unitsville	ision s, Alabama			,		invers	UNITS:	(sec-1)
		February 23, 1962								Maximum	Fet.	Alt. Layer		
Alt. Layer (MSL)		COMMILATIVE PERCENTAGE FREQUENCY 135 2.28 15.9 50.0 66.0 64.1 20.0 95.0 97.72 97.0								00.11	Shear	Freq.	(MSL)	
km	0.135		 				.0062	.0075	.0081	.0100	99.165	.0155	0.16	km.
sfc- 1.0		.0001	.0008	.0024	. 0037	.0051								#fc- 1.0
1.6- 2.0		.0001	.0007	. 0027	. 0040	.0057	. 0067	. 0080	.0098	.0114	.0157	.0158	0.16	1.0- 2.0
2.0- 3.0			.0006	, 00ZG	. 00 30	.0041	.0052	. 0062	.0070	. 9081	.0117	.0118	0.16	2.0- 3.0
3.0- 4.0			. 0005	.0019	. 0029	.0041	.0048	.0062	.0072	.0083	.0098	. 0099	0.16	3.0- 4.0
4.0- 5.0			.0005	.0019	.0029	.0041	.0049	, 0057	.0068	.0078	.0155	. 0156	0.16	4.0- 5.0
5.0- 6.0			.0005	.0019	. 00Z8	.0041	.0050	.0060	.0071	. 0092	0126	.0127	0.16	5.0- 6.0
6.0- 7.0			. 0005	.0018	. 0027	.0039	.0048	. 0062	.0071	.0080	. 01 35	. 0136	0.16	6.0- 7.0
7.0- B.O			. 0005	.0018	.0026	.0038	.0046	. 0058	.0069	.0078	.0103	. 0104	0.16	7.0- 8.0
8.0- 9.0			. 0005	. 0017	.0028	.0042	.0051	. 0060	.0074	.0082	.0121	. 0122	0.16	8.0- 9.0
9.0-10.0			. 0006	. 0020	. 0029	.0044	. 0053	. 0067	.0084	. 0100	.0149	. 0150	0.16	9, 0-10, 0
10.0-11.0			. 0005	. 0020	.0033	.0047	.0058	. 0068	.0085	. 0105	.0122	.0123	0.16	10.0-11.0
11.0-12.0			.0005	.0018	.0028	.0042	.0051	. 0063	.0082	. 0113	.0178	.0179	0.16	11.0-12.0
12.0-13.0			.0006	. 0020	. 0030	.0045	. 0055	.0068	.0080	. 0098	.0147	.0148	0.16	12.0-13.0
13.0-14.0			. 0006	. 0021	. 0034	.0051	. 0062	. 0078	.0095	.0108	.0155	.0156	0.16	13.0-14.0
14.0-15.0		. 0001	. 0010	. 0031	. 0045	. 0067	. 0077	. 0092	.0104	. 0115	.0195	.0196	0.16	14.0-15.0
15.0-16.0		.0001	.0010	. 0036	. 0049	.0064	. 0073	. 0087	.0103	. 0110	.0142	.0143	0.16	15.0-16.0
16.0-17.0			.0011	. 0035	. 0048	. 0066	.0078	. 0093	.0105	.0126	.0151	. 0152	0.16	16.0-17.0
17.0-18.0		.0001	.0010	. 0028	. 0040	. 0053	. 006Z	. 0072	. 0085	.0102	.0166	. 0167	0.16	17.0-18.0
18.0-19.0			.0007	. 0023	. 00 3 2	.0048	. 0057	.0065	. 0073	. 0079	.0107	.0108	0.16	18.0-19.0
19.0-20.0			. 0007	. 0020	. 0030	.0040	.0046	. 0053	. 0065	. 0072	.0113	.0114	0.16	19.0-20.0
20.0-21.0			. 0006	. 0019	. 0028	.0039	. 0043	.0051	. 0062	.0080	.0099	.0100	0.16	20.0-21.0
21.0-22.0			. 0004	.0015	. 0021	.0032	. 0039	.0049	. 0055	. 0065	.0107	.0108	0.16	21.0-22.0
22,0-23.0			. 0002	. 0013	. 0020	.0031	. 0039	. 0050	.0060	. 0069	.0080	. 0081	0.16	22.0-23.0
23.0-24.0			. 0001	.0011	. 0020	.0030	. 0039	. 0041	. 0050	. 0060	. 0083	. 0084	0.16	23.0-24.0
24.0-25.0			. 0002	. 0012	. 0020	.0029	. 0031	. 0040	. 0049	. 0060	.0094	. 0095	0.16	24.0-25.0
25.0-26.0			. 000Z	. 0015	. 0021	.0030	. 0039	. 0046	.0056	. 0060	.0071	. 0072	0.16	25.0-26.0
26.0-27.0			. 0003	. 0015	. 0021	.0032	. 0040	. 0049	. 0059	. 007Z	.0269	. 0270	0. 16	26.0-27.0
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				L	L	<u> </u>	<u> </u>							

NOTE: (1) When the percent frequency of minimum shear exceeded 2, 28 and/or, 0, 135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

-			TABLE	IX-9 DI	STRIBUTION	OF ZONAL	WIND SHEA	ARS .					WIND SI	
STATION:		,	SANTA MON	IICA, CALIF	ORNIA							SANTA MOI	VICA, CA	LIFORNIA
	CE PERIOD:		AUGUST											
STATION E	ELEVATION:		125 feet or	38.1 meters	MSI.							AU	GUST	
STATION (CORDINATE	S:	34.01 deg N	, 118.27 de	W	*								
PERIOD O	F OBSERVAT	TION:		, California a, Californi			17, 1956 ber 31, 1960)						
DATA SOU	RCE:		National Weather Records Center U. S. Weather Dursau									NO, OF OB	, FOR E	ACH LEVE
		U. S. Weather Durman Asheville, North Carolina									ļ	620		
PREPARE	Ď ĦΥ:		National Aeronautics and Space Administration Marshall Space Flight Center, Aerobalistica Division Aerophysics and Aetrophysics Tranch, Huntaville, Alahama										UNITS:	
		February 23, 1962									invert	e second	[44C ⁻¹]	
it. Layer		CUMULATIVE PERCENTAGE FREQUENCY								Maximum Shear	Pct. Freq.	Alt. Lay		
(MSL) `km	0.135	2.2F	15.9	5 0 .0	68. O	64.1	90.0	95.0	97.7Z	99.0	97. 865	Shear	Freq.	(MSL)
sfc- 1.0	Ī	.0007 .0024 .0038 .0052					. 0058	. 0068	.0079	. 0088	.0101	.0102	0.16	sfc- 1
1.0- 2.0		.0008 .0025 .0037 .0056 .0066 .0081 .0094 .0100						.0152	. 0153	0.16	1.0- Z			
2.0- 3.0									.0122	.0123	0.16	2.0- 3		
3.0- 4,0			.0005 .0018 .0027 .0039 .0046 .0058 .0070 .0081 .0098							.0098	. 0099	0.16	3.0- 4	
4.0- 5.0			.0005 .0018 .0027 .0038 .0043 .0052 .0059 .0069 .0085							. 0085	.0086	0.16	4.0- 5	
5.0- 6.0			.0005 .0018 .0027 .0038 .0045 .0055 .0067 .0079 .0253								. 0253	. 0254	0.16	5.0- 6
6.0- 7.0			. 0004	. 0016	. 0025	.0038	. 0043	,0052	. 0065	.0071	.0264	. 0265	0.16	6.0~ 7
7.0- B.D			. 0005	.0018	.0026	.0038	.0046	,0058	.0070	.0081	.0112	.0113	0.16	7.0- 8
8.0- 9.0		. 0001	. 0007	.0020	.0029	.0041	. 0052	. 0065	.0078	.0089	.0129	. 0130	0.16	8.0- 9
9.0-10.0			. 0005	.0019	.0029	.0042	.0050	. 0061	.0074	.0086	.0114	. 0115	0.16	9.0-10
0.0-11.0			. 0005	.0020	.0032	.0047	. 0055	. 0070	. 0088	. 0103	. 0164	. 0165	0.16	10.0-11
1.0-12.0			. 0007	.0020	. 0031	. 0049	. 0060	.0081	. 0099	.0117	. 0189	.0190	0.16	11.0-12
2.0-13.0			. 0006	.0019	.0029	. 0042	. 0054	, 0070	.0082	.0094	. 0260	. 0261	0.16	12.0-13.
3.0-14.0		.0001	. 0008	.0024	. 0037	.0056	. 0071	. 0091	.0113	.0133	. 0227	. 0228	0.16	13.0-14
4.0-15.0			. 0008	. 0030	.0044	.0064	. 0077	. 0096	.0117	.0140	. 0279	.0280	0.16	14, 0-15
5.0-16.0		. 0001	.0010	. 0034	.0048	. 0066	. 0077	.0093	. 0104	.0129	.0153	.0154	0.16	15.0-16.
6.0-17.0			.0010	. 0035	,0048	.0063	. 0076	. 0095	.0112	0126	.0194	.0195	0.16	16.0-17
7.0-18.0			. 0007	. 0025	.0039	.0053	.0063	. 0080	. 0095	.0113	.0156	.0157	0.16	17.0-18.
8.0-19.0			.0008	. 9022	. 0033	. 0047	.0054	. 0065	. 0077	.0106	.0129	. 0130	0.16	18.0-19.
9.0-20.0			. 0005	. 0020	. 0029	. 0040	.0048	. 0055	. 0066	. 0072	.0137	. 0138	0.16	19.0-20.
0.0-21.0			.0008	.0019	.0028	.0039	.0042	.0050	.0058	. 0077	. 0089	. 0090	0.16	20.0-21.
1.0-22.0			.0005	.0018	.0028	. 0037	.0041	. 0050	. 0060	.0071	. 0098	.0099	0.16	21.0-22.
2.0-23.0			.0004	.0016	. 0021	. 0030	.0038	. 0043	. 0051	. 0060	.0128	.0129	0.16	22.0-23.
3.0-24.0			. 0004	.0015	. 0021	. 0030	.0036	. 0046	. 0056	.0061	.0175	. 0176	0.16	23.0-24.
4.0-25.0	ŀ		. 000Z	.0011	. 0019	. 0029	.0033	.0041	.0051	.0062	.0088	.0089	0.16	24.0-28.
5.0-26.0			.0002	.0011	. 0020	.0029	.0037	.0041	. 0050	. 0060	.0092	. 0093	0.16	25.0-26.
6.0- 27.0			.0001	. 0010	.0019	. 0029	.0033	.0040	. 0050	. 0059	. 0124	. 0125	0.16	26.0-27.
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NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE I	X-10 DI	TRIBUTION	OF ZONAL	WIND SHEA	RS					WIND SI	
STATION:	E DEBIOD		SANTA MON		ORNIA				•			SANTA MOI	NICA, CA	LIFORNIA
STATION E			125 feet or 3		MSL							SE	PTEMBE	R
STATION C	OORDINAT	ES:	34.01 deg N	. 118.27 deg	w									
										· · · · · ·				
PERIOD OF	OBSERVA	TION:	Long Beach, Santa Monice											
DATA SOU	RCE:		National Wes		le Center							NO. OF OB	FOR E	ACH LEVEL
PREPAREI	BY:		Asheville, N	arth Carolin	Space Admi	nistration							600 UNITS:	
		-	National Aer Marshall Spi Aerophysics February 23	ice Flight Co and Astroph , 1962	enter, Aerob Lysics Branc	h, Huntsville	ision s, Alabama					inver	e second	(sec - 1)
Ait. Layer				_	MULATIVE	PERCENTA	GE FREQUE	NCY				Maximum Shear	Pct.	Alt. Layer
(MSL) km	0,135							99.865	onway.	Freq.	(MSL) km			
efc- 1.0			. 0007	. 0023	,0034	. 00 49	. 0057	.0068	.0078	. 0085	. 0115	.0116	0.17	sfc- 1.0
1,0- 2.0			.0008	. DO27	. 0041	.0059	.0068	.0082	.0097	.0109	.0174	. 0175	0,17	1.0- 2.0
2.0- 3.0			. 0006	. 0022	. 0035	. 00 49	. 0060	. 0072	,0086	. 0095	.0178	.0179	0, 17	2.0-3.0
3.0- 4.0			3000 .	. 00 20	. 0029	. 00 45	.0054	. 0075	. 0097	. 0110	.0188	0189	0.17	3,0-4.6
4.0-5.0			. 0006	.0021	. 0030	.0043	.0053	. 0063	. 0078	. 0090	.0109	.0110	0, 17	4.0- 5.0
5.0- 6.0		. 0001	. 0007	. 0020	.0030	.0042	.0050	, 0065	. 0077	.0100	. 0137	.0138	0.17	5.0- 6.0
6.0- 7.0			,0006	. 00 22	.0033	. 00 45	.0053	.0068	. 0089	. 0103	.0147	.0148	0, 17	6, 0 - 7 , 0
7.0- 8.0			.0006	. 0021	. 0035	, 0052	.0061	.0078	. 0105	. 0128	. 0176	.0177	0.17	7,0-8,0
8.0-9.0			.0005	. 0022	,0034	.0051	.0062	. 0077	. 0095	.0108	.0139	.0140	0, 17	8.0- 9.0
9.0-10.0			. 0007	. 00 26	. 0039	.0058	. 0070	.0088	. 0098	.0124	. 0241	.0242	0.17	9.0-10.0
10.0-11.0			.0008	. 0029	,0042	.0060	.0073	.0088	.0106	. 0126	.0164	.0165	0.17	10.0-11.0
11.0-12.0		.0001	.0009	. 0030	.0043	. 0065	.0076 0081	.0099	.0129	.0177	. 0217	.0218	0,17	11.0-12.0
12.0-13.0 13.0-14.0		.0001	0009	. 00 29	.0043	. 0066	.0081	.0098	.0131	.0165	.0290	. 0291	0.17	12.0-13.0
13.0-14.0 14.0-15.0		. 0001	0009	.0027	.0043	.0066	.0078	.0098	.0129	.0146	.0232	.0233	0, 17	14.0-15.0
15.0-16.0		. 0001	.0012	.0031	.0054	.0071	.0089	.0102	.0125	.0140	.0162	.0163	0.17	15.0-16.0
16.0-17.0		. 0001	.0014	. 00 40	.0058	.0074	.0085	. 0099	.0119	.0143	.0183	.0184	0.17	16.0-17.0
17.0-18.0			. 0009	, 003Z	. 00 45	. 0065	.0076	.0094	.0113	.0123	.0168	.0168	0, 33	17.0-18.0
18.0-19.0			. 0006	. 0022	. 0032	. 0044	. 0056	. 0066	.0080	. 0098	.0118	.0119	0.17	18.0-19.0
19.0-20.0			.0006	.0019	. 00 27	. 0040	, DD 46	. 0062	.0077	. 0091	.0197	. 0188	0.17	19,0-20.0
20, 0 - 21, 0			.0004	.0016	. 00 2 3	. 0037	. 0045	. 0054	.0068	. 0087	. 0120	. 0121	0.17	20.0-21.0
21.0-22.0			. 0003	.0014	.0021	. 0032	. 0039	.0044	.0057	. 0065	.0152	. 0153	0.17	21.0-22.0
22.0-23.0			.0003	. 00 1 2	0021	. 0030	.0038	. 00 46	. 0055	. 0067	.0100	.0101	0.17	22. 0 - 23; 0
23,0-24,0			. 0001	.0011	. 00 20	. 0029	. 0035	, 00 40	. 00 49	.0071	.0158	. 0159	0,17	23, 0-24.0
24.0-25.0			. 0002	.0010	.0019	. 0028	. 0030	. 0039	. 0050	. 0059	.0105	. 0206	0.17	24.0-2\$.0
25,0-26.0			. 0002	. 0011	.0019	. 0029	. 0031	. 0040	. 0050	. 0057	.0072	. 0073	0.17	25.0-26.0
26.0-27.0			.0001	. 0010	,0019	.0028	.0033	. 0041	.0055	. 0076	. 0171	. 0172	0.17	26.0-27.0
							l		<u> </u>	<u> </u>	<u> </u>			

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE	1X-11 DI	STRIBUTION	OF ZONAL	WIND SHEA	RS					E DNIW.	
STATION:	CE DEBIO		SANTA MON	ICA, CALIF	ORNIA							SANTA MOI	VICA, CA	LIFORNIA
	CE PERIOR		125 feet or	38.1 meters	MSL						-			
											·	0	CTOBER	
STATION (COORDINA'	TES:	34.01 deg N	, 118.27 deg	W									-
PERIOD O	F OBSERVA	TION:	Long Beach, Santa Monic			1956-April 1 1956-Decem								
DATA SOU	RCE:		National We	ather Record	is Center		<u> </u>					NO. OF OBS	FOR E	ACH LEVE
			U. S. Weath Asheville, N	er Bureau									620	
PREPARE	D BY:		National Aeronautice and Space Administration Marshall Space Flight Center, Aeroballistics Division										UNITS:	
			Aerophysics and Astrophysics Branch, Huntsville, Alabama February 23, 1962									inver	e second	(sec ⁻¹)
it. Layer		CUMULATIVE PERCENTAGE FREQUENCY									Maximum	Pct.	Alt. Lay	
(MSL) km	D. 135	.5 Z. 28 15.9 50.0 68.0 84.1 90.0 95.0 97.72 99.0 99.								99.865	Shear	Freq.	(MSL) km	
stc - I,f		.0001	. 0007	.0024	.0034	,0048	.0057	. 0067	.0078	. 0094	.0113	0114	0.16	∎fc - 1.
1.0- 2.0		1	. 0006	. 0026	.0041	0057	.0068	.0085	. 0097	, 0107	,0158	. 0159	0.16	1.0- 2
2, 0 - 3, 0			, 0007	. 0025	,0037	. 0055	.0064	. 0077	.0093	. 0108	.0187	.0188	0.16	2.0- 3
3, D= 4, 0		İ	. 0006	. 0025	.0038	.0057	.0068	.0081	.0099	. 0121	.0197	.0198	0.16	3.0- 4
4, 0, 5, 0			. 0005	.0019	.0031	.0048	.0058	.0074	.0101	. 0130	. 0349	. 0350	0.16	4.0- 5
5,0- 6.0		. 0001	.0006	.0019	, 0029	,0042	.0051	. 0066	. 0091	.0118	,0183	.0184	0.16	5.0- 6
£,0- 7,0			. 0006	. 0020	. 0030	.0044	,0058	. 0076	.0098	,0113	.0187	.0188	0.16	6.0- 7
7.0- 8.0		1	.0006	. 0022	.0033	. 0049	. 0060	. 0073	.0094	. 01 20	, 0209	. 0210	0.16	7.0-8
8. 0- 9 .0			.0006	. 0022	. 0035	. 0055	.0067	.0087	.0105	.0123	.0159	.0160	0.16	8.0- 9
9 .0-10 .0			.0007	. 00 25	.0037	.0057	. 0069	.0087	.0106	.0119	, 0195	. 0196	0.16	9.0-10
0.0-11.0		l	. 0008	, 00 25	. 0039	. 0060	. 0071	.0086	.0115	,0129	. 0253	. 0 2 5 4	0.16	10,0-11
11,0-12,0			, 0007	. 00 28	,0040	.0060	.0070	.0094	.0122	.0140	,0187	.0188	0.16	11.0-12
2,0-13.0		.0001	. 0009	. 00 28	. 0043	.0062	.0080	. 0096	.0115	.0132	.0234	. 0235	0.16	12, 0-13
3,0-14,0			. 0008	. 00 28	. 00 42	.0062	.0072	. 0095	.0110	, 0136	. 0255	. 0 2 5 6	0.16	13, 0-14
4,0-15.0			. 0006	,0023	.0037	.0053	.0064	.0082	. 0096	.0109	.0145	. 01 46	0.16	14.0-15
15,0-16.0			. 0007	. 0025	.0038	. 0053	. 0063	.0080	.0093	.0115	.0152	.0153	0, 16	15.0-16
6.0-17.0		.0001	.0008	.0028	. 00 40	.0058	.0068	.0083	. 0099	.0114	.0139	. 0139	0.32	16.0-17
7,0-18,0			, 0006	. 00 28	.0039	.0053	.0061	. 0070	.0089	.0118	.0158	. 0159	0.16	17.0-18
8.0-19.0			, 0008	. 0023	.0033	, 0045	.0054	. 0063	,0076	.0089	.0125	. 0125	0.16	18.0-19
9,0-20,0			.0004	.0018	. 00 26	. 0039	.0048	. 0059	. 0069	.0084	. 0229	. 0230	0,16	19.0-20
20,0-21.0			. 0003	. 0013	, 0021	.0034	. 0042	,0054	. 0067	.0094	.0188	.0189	0,16	20,0-21
1.0-22.0			. 0003	.0013	. 0021	. 0033	.0040	. 0050	.0060	.0069	. 0081	.0081	0.32	21.0-22
2,0-23.0			. 0003	,0013	. QO ZD	.0032	,0038	.0047	. 0057	.0068	.0074	.0075	0.16	22, 0-23
3,0-24,0			, 0003	,0014	. 0021	. 0031	. 0039	. 00 47	. 0057	. 0070	, 0122	.0123	0.16	23.0-24
4.0-25.0			.0003	.0013	0020	. 0030	. 0037	.0044	; 0056	.0064	. 0091	.0092	0.16	24.0-25
25,0-26.0			, 000Z	.0014	. 0023	. 0035	, 0041	,0050	, 006 Z	,0088	.0141	, 0142	0.16	25, 0-26
6,0-27.0			. 0003	.0013	0021	.0032	. 0040	, 0051	.0060	.0069	. 0101	. 0102	0.16	26,0-27
		1	1	1	1						1			1

NOTE: (1) When the percent frequency of minimum shear exceeded 2, 28 and/or 0, 135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

,			TABLE	IX-12 DI	STRIBUTIO	N OF ZONAI	. WIND SHE	ARS					. WIND S	
STATION:			SANTA MON	IICA, CALII	FORNIA		····							
REFEREN			NOVEMBER									SANTA MO	NICA, CA	LIFORNIA
STATION I	ELEVATIO	N: .	125 feet or	3f. i metere	MSL							N	OVEMBI	CR .
STATION	CORDINA	TES:	34.01 deg N	, 118.27 de	y W									
PERIOD O	FOBSERV	ATION:				1956-April 1956-Decen) .				·····		
DATA SOU	RCE:		National Weather Records Center U. S. Weather Bureau Asheville, North Carolina									NO, OF OB		ACH LEVEL
PREPAREI	BY:		National Aeronautics and Space Administration Marshall Space Flight Center, Aeroballistics Division Aerophysics and Astrophysics Branch, Huntaville, Alabama February 23, 1962										UNITS:	l.
All Trause			February 21	, 1702									e second	
Alt Layer (MSL)	(SL)								Maximum Shear	Preg.	Alt. Jaye (M51)			
km	0.135	2.28	15.9	50. U	6P.O	F4. i	90.0	95.0	97.72	99.0	99.165	 		km
efc - 1.0	.0 .0006 .0021 .0033 .0047 .0055 .0068 .0084 .0107 .0146						.0146	, 01 47	0.17	sfc - 1.0				
1.0- 2.0		l	.0007	.0024	. 00 36	. 0054	.0064	.0081	. 0098	.0108	.0137	.0138	0.17	1.0- 2.0
2.0- 3.0		. 0001	.0007	. 00 26	.0038	. 0056	.0064	.0074	.0092	. 0105	.0154	. 0155	0.17	2.0- 3.0
3, 0 - 14, 0									.0268	. 0269	0.17	3,0= 4,0		
4,0- 5,0										. 0200	. 0201	0.17	4,0- 5.0	
5,0- 6,0	•	1	.0006	. 00 20	.0033	.0052	, 0064	.0080	.0100	.0124	.0216	. 0217	0.17	5.0-6.0
6.0- 7.0		.0001	.0008	. 00 26	. 00 40	.0055	.0067	.0083	.0116	.013Z	.0164	.0165	0.17	6.0-, 7.0
7.0- 8.0			. 0006	. 0023	.0035	.0054	.0074	. 0096	.0124	.0155	. 0207	. 0208	0.17	7.0-8.0
8.0- 9.0			.0007	. DOZ4	. 0040	.0058	, 0071	. 0088	.0106	.0143	.0281	. 0 282	0.17	8.0- 9.0
9.0-10.0			. 0006	. 0026	,0043	.0066	. 0080	.0101	.0115	.0143	. 0221	. 0222	0.17	9,0-10.0
10.0-11.0			, 0007	. 0029	. 00 42	.0070	,0085	.0104	. 0126	.0140	. 0176	.0177	0.17	10.0-11.0
11.0-12.0		. 0001	,0008	. 0031	. 0043	. 0067	.0079	.0097	, 0118	.0140	.0193	.0194	0.17	11,0-12.0
12.0-13.0			.0008	. 0029	.0047	. 0073	.0088	.0115	.0133	.0158	. 0217	.0218	0.17	12,0-13.0
13.0-14.0			.0007	.0027	.0039	. 0059	.0072	.0078	,0111	. 0137	. 0207	. 0208	0.17	13.0-14.0
14.0-15.0			, 0007	.0026	.0039	. 0059	. 0071	.0094	.0113	.0137	.0183	.0184	0, 17	14,0-15,0
15.0-16.0			. 0006	. 0024	.0038	.0055	.0068	.0085	.0099	. 0126	.0169	. 0170	0.17	15.0-16.0
16,0-17.0			. 0007	, 0026	.0036	.0052	.0065	.0076	. 0090	. 0121	.0161	. 0162	0.17	16.0-17.0
17.0-18.0		, 0001	.0008	. 0024	. 0037	.0052	.0060	. 0071	.0085	. 0095	.0150	. 0151	0.17	17.0-18.0
18,0-19.0			. 0006	. 00 20	. 0029	. 00 42	. 0050	. 0059	.0074	. 0105	.0143	.0144	0.17	18.0-19.0
19,0-20.0			,0004	.0016	, 0025	.0038	.0048	. 0059	.0073	.0081	, 01 20	.0121	0.17	19.0-20.0
20.0-21.0			. 0003	. 0014	, 0021	. 0031	.0038	. 0049	. 0056	.0068	. 0138	.0139	0.17	20,0-21,0
21,0-22.0			, 0003	. 0013	.0020	. 0031	. 0039	. 0050	. 0063	.0080	.'0144	.0145	0.17	21.0-22.0
22, 0 - 23, 0			.0004	.0016	. 0024	. 0035	.0044	. 0053	. 0067	. 0079	. 0138	.0139	0, 17	22,0-21,0
23, 0 - 24, 0	j		.0003	. 0015	. 0023	. 0038	. 00 45	. 0052	. 0065	.0083	.0183	.0184	0.17	23.0-28.0
24,0-25.0			.0004	.0018	. 00 26	, 50 40	.0048	.0059	.0072	. 0083	.0117	.0118	0.17	24.0-25.0
25. 0 - 26. 0			.0004	.0018	, 00 Z9	. 00 44	.0052	, 0063	.0076	. 0109	, 0202	. 0203	0.17	25.0- 2 6.0
26.0-27.0			.0004	.0019	. 00 30	.0044	. 0052	. 0063	. 0076	.0084	.0150	. 0131	0.17	26.0-27.0
			l											

NOTE: [1] When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE	IX-13 DI	STRIBUTION	OF ZONAL	. WIND SHEA	RS					. WIND SI TRIBUTE	
STATION:			SANTA MON		ORNIA							SANTA MO	NICA. CA	LIFORNIA
REFERENC			DECEMBER											
STATION E	LEVATION	1:	125 feet or	38. I meters	MSL						L	1	ресемві	ER
STATION C	OORDINAT	E5:	34.01 deg N	, 118.27 de,	ı w									
PERIOD OF	OBSERVA	TION:				1956-April 1956-Decem	17, 1956 Der 31, 1960)	~					
DATA SOU	CE:		National Weather Records Center U. S. Weather Bureau Asheville, North Carolina								NO. OF OB		ACH LEVE	
			Asheville, ?	forth Carolin	na.								620	
PREPARED	BY:	,	National Aer Marshall Sp	ronautics and ace Flight C	Space Adm enter, Aero	Inistration ballistics Di	vision						UNITS:	
	RED BY: National Aeronautics and Space Administration Marshall Space Flight Conter, Aerobalistics Division Aerophysics and Aetrophysics Branch, Iluntaville, Alahama February 23, 1962										inver	se second	(sec ⁻¹)	
ilt. Layer (MSL)				cu	MULATIVE	PERCENTA	GE FREQUE	NCY				Maximum Shear	Pct. Freq.	Alt. Lay (MSL)
km	0.135	2.28	15.9	50.0	68.0	84.1	90.0	95.0	97.72	99.0	97.1.65			km
efc - 1,0	.0001 .0006 .0021 .0033					. 0050	.0058	.0073	.0088	. 0093	,0128	. 0129	0.16	afc - 1.
1.0- 2.0		.0001 .0008 .0027 .0043 .0059					.0070	. 0086	.0105	.0119	.0167	. 0168	0.16	1,0- 2.
2.0- 3.0		. 0001	.001 .0008 .0025 .0038 .0057 .0065						.0109	. 0130	.0196	.0197	0.16	2.0- 3.
3.0- 4.0		. 0001							.0158	.0338	. 0339	0.16	3.0- 4.	
4.0- 5.0			.0006 .0024 .0035 .0053 .0061						.0103	.0131	. 0150	.0151	0.16	4.0- 5.
5.D- 6.O			. 0006	. 0023	.0035	.0049	. 0056	.0068	. 0080	.0106	.0158	. 0159	0.16	5.0- 6.
6,0-7,0			.0007	. 0023	.0035	.0053	. 0064	,0081	.0104	. 0125	. 0196	. 0197	0.16	6.0- 7.
7, 0 - 8 , 0			. 0007	.0024	. 0037	.0053	.0064	.0083	.0094	.0113	.0167	.0168	0.16	7.0- 8.
8.0- 9.0			.0007	. 0025	. 0040	.0062	.0074	.0100	.0119	.0147	.0191	, 019Z	0.16	8.0- 9.
9.0-10.0			, 0007	.0032	. 00 49	.0070	. 0086	.0106	.0122	.0154	.0267	. 0268	0.16	9.0-10.
0.0-11.0			. 0009	.0032	.0051	. 0077	. 0090	.0106	.0138	.0187	.0300	.0301	0.16	10.0-11.
1.0-12.0			. 0009	. 0034	.0051	.0080	. 0096	.0122	.0142	.0161	.0183	.0184	0.16	11.0-12.
2.0-13.0		0001	.0010	, 0033	.0050	.0072	.0086	.0109	.0137	.0162	. 0239	. 0 2 4 0	0.16	12.0-13.
3.0-14.0			.0008	. 0033	.0047	.0072	. 0090	.0115	.0145	.0158	. 0273	. 0274	0, 16	13.0-14.
4.0-15.0		. 0001	.0008	. 0028	.0041	.0058	.0072	. 0099	.0114	.0138	.0202	. 0203	0.16	14.0-15.
5.0-16.0			. 0007	. 0025	.0038	.0055	. 0066	.0080	.0098	.0112	.0146	. 0147	0.16	15.0-16.
6.0-17.0			.0008	. 00 30	.0041	. 0063	.0073	.0086	. 0097	.0125	, 0217	. 0218	0.16	16.0-17.
7.0-18.0		.0001	. 0009	. 0028	.0041	.0059	.0066	.0080	. 0099	.0130	.0173	.0174	0.16	17.0-18.
8.0-19.0		.0001	. 0007	. 0027	.0039	.0055	.0062	.0074	.0088	. 0120	.0174	. 0175	0.16	18.0-19.
9.0-20.a		. 0001	. 0006	. 0023	.0035	.0050	. 0059	.0068	. 0077	. 0096	.0139	. 0140	0.16	19.0-20.
0.0-21.0			.0004	. 0016	. 00 26	.0040	. 00 49	.0063	.0074	. 0085	,0224	. 0225	0.16	20.0-21.
1.0-22.0			.0004	.0016	.0024	.0039	0050	. 0060	.0074	. 0090	.0168	. 0169	0.16	21.0-22.0
2. O-Z3, O			.0004	.0016	.0024	.0037	.0044	.0053	. 0064	. 0073	.0152	. 0153	0.16	22.0-23.0
. 0 - Z4. 0			. 0003	.0014	. 00 23	. 0036	. 00 42	. 0055	. 0065	.0075	. 0227	,0228	0.16	23.0-24,
. 0 - 25, 0			. 0004	.0017	.0025	. 0037	.0045	. 0056	.0068	.0082	.0127	. 01 28	0.16	24. 0 - 25.
5.0-26.0			. 0003	.0018	.0028	. 00 43	.0051	. 006 2	.0080	.0110	, 0186	.0187	0.16	25, 0 - 26.
.0-27,0			.0005	.0019	.0028	. 00 40	.0048	.0057	.0069	.0081	.0166	. 0167	0.16	26, 0-27.

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

TABLE X Page

Distribution of Meridional Wind Shears

Unit: Inverse second (sec $^{-1}$) per 1000 meter layer of altitude
Table X-1
Table X-2
Table X-3 February
Table X-4
Table X-5
Table X-6
Table X-7June148
Table X-8July
Table X-9
Table X-10 September
Table X-11
Table X-12
Table X-13 December

TABLE X-1 DISTRIBUTION OF MERIDIONAL WIND SHEARS												MERIDIONAL WIND SHEAR DISTRIBUTION		
STATION: SANTA MONICA, CALIFORNIA REFERENCE PERIOD: ANNUAL									Ī	SANTA MONICA, CALIFORNI				
			ANNUAL 125 feet or 38.1 meters MSL											
STATION ELEVATION:			INC. LOCK OF JULY LIBERTE MOL									ANNUAL		
STATION	COORDINAT	res:	34.01 deg N	l. 118.27 de	W									
PERIOD O	F OBSERVA	TION:			January I, a April 1E,)						
DATA SOURCE:			National Weather Records Center U. S. Weather Bureau									NO. OF OBS. FOR EACH LEVEL		
PREPARED BY:			U. S. weather bureau Asheville, North Carolina National Aeronaulice and Space Administration Marshall Space Flight Center, Aerobalistics Division Aerophysics and Aerophysics Branch, Huntsville, Alabama									7308 UNITS:		
Alt. Layer (MSL)				, CL	MULATIVE	PERCENTA	GE FREQUE	NCY				Maximum	Pet.	Alt. Laye
km	0.135	2, 28	15:9	50.0	68.0	B4. 1	90.0	95.0	97.72	99.0	99.865	Shear	Freq.	(MSL) km
efc-"1;0			. 0005	.0021	. 0032	. 0049	. 0059	. 0075	. 0097	.0118	.0164	. 0205	0.01	#fc- 1.0
1.0- Z.0			. 0006	. 002Z	.0034	. 0049	.0059	. 0073	0089	. 0105	.0146	. 0194	0.01	1.0- Z.0
2.0- 3,0			.0006	.0022	.0033	. 0050	.0060	.0076	. 0095	.0119	. 0179	. 0304	0.01	2.0- 3.0
3.0~ 4.0			. 0006	. 0020	.0031	. 0046	0056	.0071	.0089	.0108	.0190	. 0258	0.01	3.0- 4.0
4.0- 5.0			. 0006	.0020	.0030	. 0044	.0054	. 0069	.0088	.0108	. 0175	. 0269	0.01	4.0- 5.0
5.0~ 6.0			. 0005	.0019	. 0029	.0044	.0053	.0067	.0084	.0107	. 0228	. 0336	0.01	5.0- 6.0
6.0- 7.0			. 0005	.0019	. 0029	. 0045	.0055	.0071	. 0090	.0119	.0181	. 0345	0.01	6.0- 7.0
7.0- B.0			. 0005	.0020	. 0030	.0047	.0058	. 0073	. 0092	.0118	.0188	. 0370	0.01	7.0- 8.0
8.0- 9.0			. 0005	. 0020	.0031	.0048	. 0060	. 0078	.0100	.0126	.0186	. 0348	0.01	8.0- 9.0
9.0-10.0			.0006	.0022	.0034	.0053	. 0065	. 0084	.0110	.0140	. 0243	. 0358	0.01	9.0-10.0
0.0-11.0 1.0-12.0			. 0006	. 0023	. 0036	.0056	.0071	.0093	.0120	.0148	. 0221	.0333	0.01	10.0-11.0
2.0-13.0			. 0007	. 0027	. 0039	. 0064	.0077	.0103	.0128	.0163	. 0227	. 0334	0.01	11,0-12.0
3.0-14.0			. 0007	.0026	.0042	. 0062	.0075	.0096	.0120	.0146	.0216	.0371	0.01	12.0-13.0
4.0-15.0			.0006	. 0023	. 0036	. 0055	.0068	.0085	.0108	.0131	.0224	.0320	0.01	13.0-14.0
5.0-16.0			. 0005	.0020	.0032	.0049	. 0059	. 0075	.0091	.0112	.0177	. 0351	0.03	15.0-16.0
6.0-17.0			. 0005	. 0019	. 00 30	.0045	.0056	. 0070	.0088	.0109	.0159	.0224	0.01	16.0-17.0
7.0-18.0			. 0005	0018	. 0027	.0041	0050	. 0061	.0078	. 009В	.0150	. 0249	0.01	17.0-18.0
8.0-19.0			0004	. 0016	. 0024	. 0036	.0044	.0056	.0072	.0090	0157	. 0196	0.01	18.0-19.0
9.0-20.0			. 0003	.0014	0022	.0033	0040	.0052	.0065	.0081	.0130	. 0278	0.01	19.0-20.0
0.0-21.0			. 0003	.0013	. 0020	. 0031	. 0038	.0048	.0060	.0080	.0118	. 0213	0.01	20.0-21.0
1.0-22.0			.0003	.0012	. 0019	. 0030	.0037	. 0046	. 0058	. 0070	.0117	.0176	0.01	21.0-22.0
2.0-23.0			. 000Z	.0012	.0018	. 0029	.0035	. 0045	. 0057	. 0069	.0119	. 0244	0.01	22. 0 -23.0
3.0-24.0	Ì		. 000Z	. 0011	.0018	. 0029	. 0036	. 0045	. 0056	.0073	.0138	. 0238	0.01	23.0-24.0
4.0-25.D			.0002	0011	.0018	. 0029	. 0035	. 0044	. 0056	. 0070	.0112	. 0254	0.01	24,0-25.0
5.0-26.0	l		. 0002	.0011	.0018	, 002B	. 0035	.0045	. 0058	. 0070	.0105	. 0147	0.01	25.0-26.0
6.0-27.0			. 000Z	.0011	. 0018	. 0029	. 0035	. 0046	.0057	. 0070	.0108	. 0146	0.01	26,0-27.0
- 1			1				1							ĺ

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE X-	2 DIST	RIBUTION O	F MERIDIO	NAL WIND S	HEARS				MERIDIO	AAL WINI TRIBUTIO	
STATION:			SANTA MON	CA, CALIF	ORNIA									
	CE PERIOD		JANUARY									SANTA MO	VICA, CA	LIFORNIA
STATION I	ELEVATION	l:,	125 feet or :	18.1 meters	MSL.							;	ANUARY	
STATION	COORDINAT	ES.	34.01 deg N	, 118.27 de	g W									-
PERIOD O	F OBSERVA	TION:	Long Beach, Santa Monica	California a, Californi	January I, a April 18,	1956-April 1956-Deceni	17, 1956 ber 31, 1966)						
DATA 50U	RCE:		National West U. S. Weath Asheville, N	er Burean								NO. OF OBS	5. FOR E	ACH LEVEL
PREPAREI	D BY:		National Aer	onautice an	d Space Admi enter, Aerol hysics Branc	infatration	v (a lon					 	UNITS:	
			Aerophysica February 23	and Astrop	hysics Branc	h, Huntsvill	e, Alabama					invers	e eecond	(sec-1)
Alt. Layer					MULATIVE	PERCENTA	GE FREQUE	NCY				Maximum	Pet.	Alt. Layer
(MSL) km	0.135	2. 28	15:9	50.0	68.0	84.1	90.0	95.0	97.12	99.0	99.865	Shear	Freq.	(MSL) *
afc- 1.0			. 0006	. 0024	.0038	. 0059	0070	.0089	.0105	0126	0171	.0171	0.32	efc- 1.0
1.0- 2.0			. 0005	. 0024	. 0036	. 0056	. 0066	.0083	. 0096	. 0106	.0132	. 0133	0.16	1.0- 2.0
2.0-3.0			. 0005	. 0024	. 0038	. 0054	. 0071	,0090	.0108	.0150	.0303	. 0 3 0 4	0.16	2.0- 3.0
3.0- 4.0			.0006	. 0022	. 0036	. 0056	.0067	. 0085	.0107	.0133	.0241	. 0242	0.16	3.0- 4.0
4.0- 5.0			. 0007,	. 0026	. 0038	. 0053	.0063	. 0082	. 0107	,0131	.0176	. 0177	0.16	4.0- 5.0
5.0- 6.0			.0007	.0023	.0036	. 0054	.0067	.0085	. 0106	. 0137	. 0236	. 0239	0.16	5.0- 6.0
6 9- 7.0			.0005	. 0021	.0034	. 0056	.0068	.0088	. 0117	. 0138	.0182	. 0183	0.16	6.0- 7.0
7.0- 8.0			. 0007	. 0025	.0040	. 0061	.0071	. 0089	.0129	. 0147	.0188	. 0189	0.16	7.0- 8.0
8.0-19.0			. 0006	. 0025	. 0039	. 0061	. 0076	. 0101	. 0127	. 0150	. 0347	. 0348	0.16	8.0- 9.0
9.0-10.0			.0006	. 0029	.0044	. 0068	.0084	.0110	. 0138	. 0173	.0196	. 0197	0.16	9.0-10.0
10.0-11.0			. 000a	. 0030	. 0046	. 0077	.0097	. 0120	. 0139	.0184	. 0268	. 0269	0.16	10.0-11.0
11.0-12.0			.0008	0035	. 0054	. 0085	. 0104	.0137	.0162	.0183	. 0266	. 0267	0.16	11.0-12.0
12.0-13.0		.0002	.0010	. 0039	. 0059	. 0090	.0115	.0144	.0190	. 0221	. 0274	. 0275	0.16	12.0-13.0
13.0-14.0			.0010	. 0034	. 0053	. 0074	. 0088	.0113	.0130	.0141	. 0219	0220	0.16	13,0-14.0
14.0-15.0			.0009	. 0030	. 0048	. 0067	. 0083	. 0105	.0131	. 0168	. 0306	. 0307	0.16	14.0-15.0
15.0-16.0	}		.0006	. 0025	. 0039	. 0062	. 0075	. 0089	.0111	.0146	. 0198	.0199	0.16	15.0-16.0
16.0-17.0	•		.0006	.0023	. 00 35	.0057	. 0066	. 0080	.0103	1610	. 0202	. 0203	0.16	16.0-17.0
17.0-18.0	-		.0006	. 0021	.0034	. 0050	0059	.0077	. 0096	.0129	.0184	.0185	0.16	17.0-18.0
18.0-19.0			. 0005	.0018	.0028	.0044	.0050	. 0062	. 0076	.0089	. 0145	.0146	0.16	18.0-19.0
19.0-20.0	Ì		. 0004	. 0017	.0025	. 0040	.0048	. 0059	. 0075	. 0092	.0196	. 0197	0.16	19.0-20.0
20.0-21.0			.0003	.0016	. 0024	. 0036	.0044	. 0053	.0068	.0088	.0107	.0108	0.16	20 . 0- 21.0
21.0-22.0			. 0003	.0012	.0020	. 0033	.0039	. 0048	. 0060	. 0074	.0100	. 0101	0.16	21.0-22.0
22.0-23.0	l		. 0003	.0013	.0020	. 0030	.0037	. 0050	.0064	.0076	.0111	.0112	0.16	22.0-21.0
23.0-24.0	1		.0003	.0013	.0022	. 0033	.0039	. 0049	. 0060	. 0073	. 0097	. 0098	0.16	23.0-24.0
24.0-25.0			. 0003	. 0012	. 0020	. 0032	. 0038	. 0047	.0055	. 0065	.0114	.0115	0.16	24.0-25.0
25.0-26.0	- 1		.0003	.0014	. 0021	.0031	. 0037	. 0050	. 0065	. 0073	.0100	.0101	0.16	25.0-26.0
26.0-27.0			.000Z	.0013	.0021	. 0032	. 0040	. 0051	.0061	. 0068	.0117	.0118	0.16	26.0-27.0
1	l		1 1											

NOTE: (1) When the percent frequency of minimum shear exceeded 2, 28 and/or 0, 135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

		TABLE X-	3 DISTR	LIBUTION OI	F MERIDION	AL WIND SE	IEARS				MERIDION DIS	IAL WIND	
STATION:		SANTA MON	ICA, CALIF	ORNIA		,					SANTA MON	VICA, CA	LIFORNIA
REFERENC		FEBRUARY	10. 11										
STATION E	LEVATION:	125 feet or 1	se. i mesers	MSL						L	F	EBRUAR	Y
STATION C	OORDINATES:	34.01 deg N	, 118.27 deg	w									
PERIOD OF	OBSERVATION	Long Beach, Santa Monic	California , California	January I. April 18,	1956-April 1 1956-Decemi	7, 1956 ber 31, 1960							•
DATA SOUR	CE	National We	ther Record	s Center							NO. OF OBS	FOR E	ACH LEVE
		U. S. Weath Asheville, N	lorth Carolin								<u> </u>	568	
PREPARED	BY:	National Aer Marshall Sp Aerophysics	onautics and	Space Admi	nistration allistics Div	inion						UNITS:	
		Aerophysics February 23	and Astroph	ysics Branc	h, Hunt∎villi	e, Alabamu					inver	e second	(sec - 1)
t. Layer			cu	MULATIVE	PERCENTA	GE FREQUE	NCY				Maximum Shear	Pct. Freq.	Alt. Lay
(MSL) km	0.135 2.	28 15.9	50.0	68.0	54.1	90.0	95.U	97.72	99.0	99.865			km
afc- 1.0		. 0003	. 0022	. 0036	. 0057	.0071	. 0092	. 0125	.0149	.0204	. 0205	0.18	ofc- 1
1.0- 2.0		. 0008	. 0025	. 0039	. 0056	.0068	.0080	. 0106	. 0135	.0193	. 0194	0.18	1.0- 2
2.0- 3.0		.0007	. 0026	.0040	. 0060	. 0072	. 0090	.0114	.0127	.0140	. 0140	0.35	2.0-
3.0- 4.0		. 0005	. 0021	. 0032	. 0049	.0060	. 0076	.0091	.0104	.0173	. 0174	0.18	3.0- 4
1.0- 5.0		.0006	. 0023	. 00 35	. 0051	.0062	.0080	.0101	,0112	.0147	.0148	0.18	4.0- !
5.0- 6.0		. 0005	. 0022	.0034	. 0050	.0061	. 0077	. 0099	.0127	. 0227	. 0228	0.18	5.0- 6
6.0- 7.0		. 0007	. 0023	. 0037	. 0058	. 0069	.0084	. 0092	. 01 30	.0181	, 0182	0.18	6.0-
7,8- a.0		. 0007	.0024	. 0038	. 0059	. 0075	.0088	.0110	.0145	. 0186	.0187	0.18	7.0- (
8.0- 9.0		. 0006	. 0026	. 0042	. 0061	. 0070	. 0096	.0128	.0147	.0187	.0188	0.18	8.0~
9.0-10.0		. 0007	. 0027	. 0045	. 0068	.0084	.0113	.0161	.0184	. 0292	. 0293	0.18	9.0-10
0.0-11.0		. 0008	. 0031	. 0048	. 0075	. 0097	. 0139	.0172	. 0195	, 033Z	. 0333	0.18	10.0-1
1,0-12.0		.0008	. 0033	. 0054	. 0080	. 0097	. 0123	. 0152	. 0195	.0333	. 0334	0.18	11.0-1
Z. 0-13. 0		.0009	. 0030	. 0049	. 0076	. 0093	. 0121	.0140	.0178	. 0246	. 0247	0.18	12.0-1
3.0-14.0		.0007	. 0029	. 0045	. 0068	. 0086	.0112	,0143	.0163	. 0319	. 0320	0.18	13.0-1
4,0-15.0		.0006	. 0024	. 0038	. 0063	. 0082	.0118	.0147	.0170	. 0306	. 0307	0.18	14.0-1
5, D-16.0		.0006	. 0022	. 0034	. 0058	. 0069	. 0087	.0108	. 0145	. 0213	. 0214	0.18	15.0-1
6.0-17.0		. 0005	. 0020	. 0031	. 0046	. 0058	.0072	. 0105	.0119	. 0147	.0148	0.18	16.0-1
7.0-18.0		. 0004	.0018	. 0028	.0044	. 0054	. 0070	. 0096	. 0124	. 0143	. 0144	0.18	17.0-1
8.0-19.0		. 0005	.0018	. 0026	.0040	. 0050	. 0071	. 0089	. 0108	. 0189	.0190	0, 18	18.0-1
9.0-20.0		. 0003	. 0014	. 0023	. 0035	.0044	. 0059	. 0071	. 0084	. 0277	. 0278	0.18	19.0-2
0.0-21.0		,0003	.0014	.0021	.0033	.0040	. 0051	. 0081	.0117	. 0212	.0213	0.18	20.0-2
1.0-22.0		.0003	.0013	. 0020	.0030	. 0036	.0047	. 0060	. 0069	.0119	.0120	0.18	21.0-2
2.0-23.0		.000z	.0012	.0018	.0030	. 0039	. 0051	. 0060	. 0072	, 0243	. 0244	0.18	22.0-2
3, 0-24, 0		.0003	. 0011	.0019	.0031	.0037	.0049	. 0064	. 0083	.0176	. 0177	0.18	23.0-2
4.0-25.0		.0002	.0013	. 0021	.0031	.0041	.0053	. 0069	. 0085	. 0218	. 0219	0.18	24.0-2
5, 0-26, 0		.0003	.0012	. 0019	.0032	. 00 38	.0050	0064	. 0092	.0118	. 0119	0.18	25.0-2
6.0-27.0		.0003	. 0015	,0024	.0040	.0048	.0061	.0071	.0079	.0103	.0104	0.18	26.0-2
5.5-27.0	l	1	1	'	1		1	1	1	i	1	l	1

NOTE: (1) When the percent frequency of minimum shear exceeded 2, 28 and/or 0, 135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

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			TABLE X-	4 DIST	RIBUTION O	F MERIDION	AL WIND SI	HEARS				MERIDIO!	AL WINI	
STATION:			SANTA MON	ICA, CALIF	ORNIA							SANTA MOI	IICA CA	LIFORNIA
	CE PERIOD		MARCH					···				3A,11A MOI	TICK, CK	DIT OKNER
STATION	ELEVATION	4 :	125 feet or 1	38. 1 meters	MSL							3	ARCH	,
STATION	COORDINAT	ES:	34.01 deg N	, 118.27 deg	w									
PERIOD O	F OBSERVA	TION:	Long Beach, Santa Monic		January 1, April 18,									
DATA SOL	JRCE:		National We-		is Center							NO. OF OBS	FOR E	CH LEVEL
			Asheville, N	forth Carolin).E							<u> </u>	620	
PREPARE	D BY:		National Aer Marchall Sp. Aerophysics	onautice and ace Flight C	i Space Admi enter, Aerol	inistration allistics Div	islon					1	UNITS:	
			February 23	. 1962	systes brane	a, Muntavill	e, Alabama					invers	e second	(sec-1)
Alt. Layer (MSL)				CU	MULATIVE	PERCENTA	GE FREQUE	NCY				Maximum	Pet.	Alt, Laye
km km	0,135	2. 2B	15.9	50.0	68.0	84.1	90.0	95.0	97, 72	99.0	99.865	Shear	Freq.	(MSL) km
sfc- 1.0			. 0005	. 0024	. 0175	. 0176	0.16	sfc- 1.0						
1.0- 2.0			. 0006	. 0021	. 0176	. 0177	0.16	1.0- 2.0						
2.0- 3.0			.0005	.0021	.0034	.0050	. 0061	. 0082	. 0112	.0143	. 0192	.0193	0.16	2.0- 3.0
5,0- 4.0			.0006	.0019	.0031	. 0045	. 0056	. 0075	. 0089	.0119	. 0229	. 0230	0.16	3.0- 4.0
4.0- 5.0			.0004	.0018	.0027	.0041	.0052	.0066	. 0087	. 0100	. 0208	. 0209	0.16	4,0- 5.0
5.0- 6.0			. 0005	.0020	.0029	.0044	.0053	.0070	. 0086	. 0102	.0335	.0336	0.16	5.0- 6.0
6.0- 7.0 7.0- 8.0			. 0005	. 0018	.0029	.0043	.0051	.0063	. 0089	.0122	.0265	.0266	0.16	7.0- 8.0
8.0- 9.0			. 0004	. 0020	.0032	. 0048	.0064	.0077	.0103	. 0150	. 0189	. 0190 . 0290	0.16	B. D- 9. 0
9.0-10.0			. 0005	. 0023	. 0036	.0057	. 0067	.0089	.0105	. 0132	.0340	.0341	0.16	9.0-10.0
10.0-11.0			. 0005	. 0023	. 0036	.0062	.0079	.0114	.0141	. 0165	. 0228	. 0229	0.16	10.0-11.0
11.0-12.0			. 0006	. 0028	. 0044	. 0067	. 0089	. 0112	. 0139	. 0166	. 0300	. 0301	0, 16	11.0-12.0
12.G-13.O			. 0005	. 0029	. 0045	. 0069	. 0082	. 0108	. 0133	. 0161	. 0264	. 0265	0.16	12.0-13.0
13.0-14.0			. 0005	. 0024	. 0039	. 0060	. 0072	. 0093	.0119	. 0162	. 0236	. 9237	0.16	13.0-14.0
14.0-15.0			. 0005	. 0023	. 0035	. 0049	.0057	. 0080	. 0089	. 0109	. 0175	. 0176	0.16	14.0-15.0
15.0-16.0			. 0004	. 0017	. 0027	. 0041	. 0049	. 0064	. 0082	. 0102	. 0140	.0141	D. 16	15.0-16.0
16.0-17.0			. 0003	. 0016	0026	. 0039	.0048	. 0062	. 0079	. 0094	.0134	. 0135	0.16	16.0-17.0
17.0-18.0			.0004	. 0017	. 0026	.0037	.0045	. 0055	0064	. 0072	.0130	.0131	0.16	17.0-18.0
18.0-19.0 19.0-20.0			.0004	. 0015	. 0023	. 0033	.0041	.0052	. 0070	. 0091	.0161	.0162	0.16	18.0-19.0
19.0-20.0 20.0-21.0			.0003	.0014	.0022	. 0033	.0040	.0049	. 0058	. 0072	.0152	.0153	0.16	19.0-20.0 20.0-21.0
21.0-22.0			.0003	.0013	.0021	. 0030	.0036	.0044	.0054	.0066	.0104	.0105	0.16	20.0-21.0
22. D-23. O			.0003	. 0011	.0018	. 0027	. 0033	.0042	.0054	. 0071	.0112	.0139	0.16	ZZ, 0-23. 0
23.0-24.0			. 0002	. 0010	. 0016	. 0029	. 0037	. 0046	. 0059	. 0069	.0138	.0139	0.16	23.0-24.0
24.0-25.0			0002	. 0010	. 0017	.0030	. 0036	.0047	. 0056	. 0070	. 0110	.0111	0.16	24.0-25.0
25.0-26.0.			. 0002	. 0009	. 0017	. 0028	. 0037	. 0049	. 0062	. 0081	. 0146	.0147	0.16	25.0-26.0
26.0-27.0			. 0002	. 0010	. 0017	. 0026	. 0034	. 0045	. 0058	. 0070	. 0112	. 0113	0.16	26.0-27.0
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NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE X-	5 DISTI	RIBUTION O	F MERIDION	AL WIND SI	IEARS				MERIDIÓN DIST	AL WINI RIBUTIO	
STATION:			SANTA MON	ICA, CALIF	ORNIA							SANTA MON	IICA. CA	LIFORNIA
REFERENC	CE PERIOD	:	APRIL											
STATION F	LEVATION	1	125 feet or 1	E. I meters	MSL.								APRIL	
STATION C	CORDINAT	TS:	34.01 deg N	118 27 deg	w									
PERIOD OF	OBSERVA	TION:	Long Beach,	California	January I.	1956-April 1	7, 1956						-	
			Santa Monic			1956 - Decemi	er 11, 1960					1		
DATA SOU	RCII:		National Westle U. S. Weath	er Burnau								NO. OF OBS	600	CH LEVE
PREPARE	DY:		Asheville, National Aca	unautics and	Space Admi	nist: ation							UNITS:	
			National Ass Marshall Spi Aerophysics February 23	and Astroph 1962	enter, Aerob Systes Branc	h, Huntsville	i, Alabania					invers	e second	(sec - 1)
t Layer					MULATIVE	PERCENTA	SE FREQUE	NCY				Maximum Shear	Pct. Freq.	Alt. La (MSL)
(MSL) km	0.115	2,28	15.9	5 0 0	68.0	64.1	90.0	95.0	97.72	99.0	99.865	,e.	7.164.	km
sfc- 1.0			.0006	. 0023	. 00 37	.0056	. 0065	.0084	.0113	. 0127	.0176	.0176	0.33	afc-
1.0- 2.0			. 0006	. 0023	. 00 35	.0050	. 0060	.0075	.0096	.0119	.0148	. 0149	0.17	1.0-
2,0- 3.0			. 0006	. 0022	. 0035	. 0053	. 0063	.0074	.0098	.0130	. 0248	. 0249	0.17	2.0-
3.0-4-0			. 0005	.0020	. 0030	.0047	. 0056	. 0074	. 0092	.0134	.0218	. 0219	0.17	3.0-
4.0- 5.0		, 0001	.0006	. 0022	.0031	. 0046	. 0054	. 0075	. 0092	.0162	.0267	. 0268	0.17	4.0-
5,0- 6.0			. 0005	.0019	. 0029	.0042	.0051	.0067	. 0094	.0108	. 0227	. 0228	0.17	6.0-
6. 0- 7.0	:		. 0005	.0018	. 0030	.0044	. 0053	,0074	. 0096	.0154	.0369	. 0370	0.17	7.0-
7.0-8.0			.0004	.0017	.0028	.0046	.0058	. 0072	.0096	.0116	.0149	.0150	0.17	8.0-
8.0- 9.0 9.0-10.0			.0005	0021	. 0032	. 0050	. 0060	. 0077	.0106	.0157	.0294	. 0295	0.17	9.0-1
0.0-11.0			. 0005	. 0022	. 0033	. 0055	. 006В	. 0096	.0113	.0141	.0256	. 0257	0.17	10.0-1
1.0-12.0			. 0005	. 0023	. 0036	. 0058	. 0070	. 0090	.0117	.0139	. 0227	. 0228	0.17	11.0-1
2.0-13.0			. 0007	. 0027	.0045	. 0068	. 0084	.0111	.0126	. 0137	. 0209	.0210	0.17	12.0-1
3, 0-14. D			. 0005	. 0025	. 0039	.0064	. 0075	. 0096	. 0122	.0151	. 0218	, 0219	0.17	13.0-1
4.0-15.0			.0006	. 0021	. 0032	. 0053	. 0064	. 0800	.0087	.0102	.0148	. 0149	0.17	14.0-1
5,0-16,0			.0004	. 0017	. 0026	. 0039	. 0047	. 0062	.0082	.0111	. 0209	. 0210	0.17	15.0-1
6.0-17.0			.0004	.0015	. 0026	.0040	, 0048	. 0069	. 0093	. 0133	.0184	. 0185	0.17	16.0-1
7. 0-18 .0			.0004	.0016	. 0025	.0041	. 0051	. 0061	.0080	.0103	. 0248	. 0249	0.17	17.0-1
8.0-19.0			. 0004	. 0013	. 0021	.0034	. 0043	. 0055	.0072	.0099	.0183	.0184	0.17	18.0-1
9.0-20.0			.0003	.0016	. 0023	.0034	.0040	.0054	.0067	. 0099	. 0139	.0140	0.17	19.0-2 20.0-2
0.0-21.0			.0003	.0014	. 0022	.0033	.0041	.0051	.0065	. 0090	.0154	. 0155	0.17	21.0-2
1.0-22.0 2.0-23.0			. 0002	. 0013	.0020	.0031	. 0038	.0050	.0070	.0080	.0137	. 0138	0.17	22.0-2
3.0-24.0			. 0003	.0012	.0019	.0030	.0038	.0049	.0069	. 0082	. 0138	.0139	0.17	23.0-2
4.0-25.0			. 000Z	. 0011	.0018	. 0029	. 0037	. 0045	. 0055	. 0067	. 0084	. 0085	0.17	24.0-2
5.0-26.0			.0001	.0011	.0018	. 0030	. 0036	.0047	, 0058	.0068	.0091	. 0092	0.17	25.0-2
6.0-27.0			, 0002	.0010	.0018	. 0029	. 0036	.0048	. 0064	.0076	.0129	. 0130	0.17	26.0-2
			1			I	l	l	l	l	1			1

NOTE: (1) When the percent frequency of minimum shear exceeded 2. 28 and/or 0. 135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency

STATION:			TABLE X-	6 DISTI	RIBUTION O	F MERIDION	IAL WIND SI	EAR					NAL WINI TRIBUTIO	SHEAR ON
3.7.1011.			SANTA MON	CA, CALIF	ORNIA									
REFERENCE			MAY								L	SANTA MO	VICA, CA	LIFORNIA
STATION ELI	EVATION	l:	125 feet or 1	8.1 meters	MSL								MAY	
STATION CO	ORDINAT	E5:	34.01 deg N.	118.27 deg	W					-				. ,
PERIOD OF	OBSERVA	TION:	Long Beach, Santa Monica	California , California	January I. April 18,	1956-April I 1956-Decem	7, 1956 ber 31, 1960							
DATA SOURC	CE:		National West U. S. Weath Asheville, N	er Bureau							 	NO. OF OBS	620	ACH LEVEL
PREPARED E	BY:		National Aer Marchall Spe Aerophysics	onautics and	Space Admi	inistration	ision.					1	UNITS:	
1			Aerophysics February 23	and Astroph	yaics Branc	h, Huntaville	, Alabama					inver	e second	(sec ¹)
Alt. Layer				cu	MULATIVE	PERCENTA	SE FREQUE	NCY				Maximum	Pct.	Alt, Layer
(MSL) — km	0.135	2.28	15.9	50.0	68.0	84.1	90.0	.95,0	97.72	99.0	99.863	Shear	Freq.	(MSL) km
efc- 1.0		-	.0006	. 0021	. 0031	. 0048	. 0055	.0071	.0084	.0108	.0174	. 0175	0.16	ofc- 1.0
1.0- 2.0		. 0001	. 0009	. 0027	. 0041	. 0037	.0067	. 0079	. 0090	.0104	.0167	. 0168	0.16	1.0- 2.0
2.0- 3.0		. 0001	. 0007	. 0023	. 00 š&	. 9953	. 0061	. 0076	.0092	.6110	. 0154	. 0155	0.16	2.0- 3.0
3.0- 4.0		. 0001	. 0006	. 5051	. 0032	. 0045	. 0053	. 0072	. 0099	.0109	. 0158	. 0159	0.16	3.0- 4.0
4.0- 5.0			. 0006	. 0019	. 0031	. 0048	. 0056	. 0068	.0089	.0111	.0199	. 0200	0.16	4.0- 5.0
5.0- 6.0			. 0005	.0018	. 0028	.0044	. 0053	. 0065	. 0090	.0114	.0212	. 0213	0.16	5,0- 6.0
6.0- 7.0			0005	.0018	. 0028	.0044	. 0054	. 0068	. 0085	.0121	. 0206	. 0207	0.16	6.0- 7.0
7.0- 8.0			.0005	. 0018	. 0028	. 0043	. 0054	. 0067	. 009Z	.0112	. 0230	. 0231	0.16	7.0-8.0
8.0- 9.0			.0005	.0019	0030	. 0048	. 0060	0081	. 0097	.0126	. 0302	. 0303	0.16	8.0- 9.0
9.0-10.0			.0006	. 0021	. 0033	0049	. 0059	. 0074	. 0102	.0124	. 0224	. 0225	0.16	9.0-10.0
10.0-11.0			.0005	. 0021	. 0033	. 0050	. 0058	. 0073	. 0087	.0108	. 0314	. 0315	0.16	10.0-11.0
11,0-12.0			. 0006	. 0023	. 0036	.0059	. 0074	.0100	. 012B	.0163	.0187	.0188	0.16	11.0-12.0
12.0-13.0			. 0007	. 0028	. 0043	.0068	. 0077	. 0094	. 0121	.0147	. 0214	. 0215	0.16	12.0-13.0
13.0-14.0		. 0001	.0008	. 0026	. 0041	. 0062	.0076	. 0092	. 0124	.0143	. 0203	. 0204	0.16	13.0-14.0
14.0-15.0			.0006	. 0021	. 0033	.0049	. 0058	. 0076	. 009B	.0115	. 0147	. 0148	0.16	14.0-15.0
15.0-16.0			. 0006	. 0018	. 0030	.0045	.0051	. 0061	. 0073	.0083	.0140	.0141	0.16	15,0-16.0
16.0-17.0			.0005	.0017	. 0027	.0040	. 0049	. 0063	. 0074	. 0092	.0151	.0152	0.16	16.0-17.0
17.0-18.0			.0004	. 0015	. 0025	. 0037	. 0046	. 0056	. 0077	. 0095	.0175	.0176	0.16	17.0-18.0
18.0-19.0			.0004	, 0016	0025	.0039	. 0047	. 0060	.0086	. 0099	.0187	.0188	0.16	18.0-19.0
19.0-20.0			.0003	.0014	.0023	.0033	. 0041	. 0050	. 0065	.0090	.0150	.0151	0.16	19.0-20.0
20, D-Z1. O			. 0003	. 0012	.0020	. 0032	. 0038	. 0047	. 0057	.0082	.0118	. 0119	0.16	20.0-21.0
21.0-22.0			. 0002	. 0010	.0018	. 0028	. 0035	.0041	. 0053	.0061	.0113	.0114	0.16	21,0-22.0
22,0-23.0			.0002	. 0010	. 0017	. 0027	.0034	. 0044	. 0056	. 0073	0098	. 0099	0.16	22.0-23.0
23.0-24.0			. 0002	. 0010	. 0017	. 0029	.0035	. 0045	. 0055	.0071	,0123	. 0124	0.16	23.0-24.0
24.0-25.0			.0002	. 0010	. 0017	. 0027	.0033	. 0043	. 0059	0077	.0176	.0177	0.16	24.0-25.0
25, 0~26. 0			.0002	. 0010	.0017	0028	.0034	. 0044	.0056	0066	0089	. 0090	0.16	25.0-26.D
26.0-27.0			.0002	. 0009	0016	.0024	.0031	.0044	. 0052	.0066	.0098	. 0099	0.16	26.0-27.0
1					, 55.0			.0071		.0000	,	.0077	0.10	20.0-27.0
			ليبل						L		<u> </u>			

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 tumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE X-	7 DISTR	IBUTION OF	MERIDION.	AL WIND SH	EARS				MERIDION DIST	AL WIND	
STATION:			SANTA MONI	CA, CALIF	DRNIA							SANTA MON	IICA, CA	LIFORNIA
REFERENC	E PERIOD:		JUNE											
STATION F	LEVATION		125 feet or 3	8.1 meters	MSI							J	UNE	
STATION C	COORDINAT	ES:	34.01 deg N,	118.27 deg	w									
PERIOD OF	OBSERVA	TION:	Long Beach, Santa Monica	California	January I, 1	956-April 1	7, 1956 er 31, 1960							
DATA SOU	RCE:		National Wes						•			NO. OF OBS	FOR E	ACH LEVE
			U. S. Weathe Asheville, N	ог Вигови									600	
PREPARE	BY:		National Aer	onautics and	Space Admi	nistration allistics Div	ision						UNITS:	
			Aerophysics February 23	and Astroph	ysics Branch	n, ifuntaville	, АІабапіа			,		invers	e second	(sec ⁻¹)
t. Layer				ÇU	MULATIVE	PERCENTAC	SE FREQUE	VCY		г	т	Maximum Shear	Pct. Freq.	Alt, Lay (MSL)
km	0.135	2.26	15.9	50.0	68.0	F4. J	90.0	95.0	97.72	99.0	99. 865			km
afc- 1.0	1		. 0006	. 0022	.0032	. 0047	.0056	. 0070	.0084	. 0099	.0135	.0136	0.17	ofc- i
1.0- 2.0		. 0001	. 0006	. 0021	.0033	. 0051	. 0060	. 0073	.0088	.0107	.0150	.0151	0.17	1.0- 2
2.0- 3.0		.0001	. 0007	. 0023	.0034	. 0048	. 0057	.0070	.0079	.0091	.0112	.0113	0.17	2.0- 3
3.0-4.0		.0001	. 0006	. 0023	.0034	. 0048	.0056	. 0067	.0080	.0090	.0122	.0123	0.17	3.0- 4
4.0- 5.0	İ		. 0005	. 0020	.0029	. 0040	. 0049	. 0058	.0081	.0097	.0160	.0161	0.17	4.0- 5
5.0- 6.0		.0001	. 0005	.0019	.0028	. 0041	. 0050	. 0064	.0073	.0088	.0302	.0303	0.17	6.0- 7
fi. 0 - 7.0	l		. 0005	.0018	, 0027	. 0040	. 0050	. 0060	. 0071	.0083	.0132	.0168	0.17	7.0-8
7.0- B.O	1		. 0005	.0018	.0028	.0041	. 0051	. 0064	.0081	.0104	.0167	.0124	0.17	8.0- 9
8.0- 9.0			.0005	.0018	.0027	.0040	.0051	.0065	.0086	.0104	.0160	.0161	0.17	9.0-10
9.0-10.0		. 0001	.0005	.0019	.0028	.0043	.0056	.0071	.0087	.0100	.0124	. 0125	0.17	10.0-11
0.0-11.0			. 0005	.0019	. 0034	.0051	.0063	.0086	.0100	. 0134	.0191	. 0192	0.17	11.0-1
1.0-12.0 2.0-13.0			.0006	.0025	.0038	.0057	.0067	. 0084	.0106	. 0139	.0279	. 0280	0.17	12.0-13
3.0-14.0			.0007	.0024	.0037	.0059	.0072	. 0095	.0112	.0148	.0163	. 0164	0.17	13.0-14
4,0-15.0			.0007	.0024	.0036	.0055	.0069	.0082	. 0098	.0115	.0173	.0174	0.17	14.5-19
5.0-16.0			.0006	0021	.0011	. 0050	.0062	. 0081	0092	.0108	.0170	. 0171	0.17	15.0-10
6.0-17.0			.0006	.0021	.0031	. 0050	.0058	. 0072	. 0095	.0108	.0137	. 0138	0.17	16.0-1
7.0-18.0		.0001	.0005	.0018	.0028	.0042	. 0051	. 0062	. 0083	.0104	.0152	. 0153	0.17	17.0-18
8.0-19.0			.0005	.0017	0026	.0037	. 0045	. 0056	. 0076	. 0091	.0140	.0141	0.17	18.0-19
9.0-20.0			.0003	.0014	.0023	. 0033	. 0039	, 0047	. 0056	.0070	.0109	. 0110	0.17	19.0-20
0.0-21.0			.0003	. 0012	.0018	. 0029	. 0034	. 0045	.0052	.0064	. 0080	. 0081	0.17	20.0-2
1,0-22.0			2000	.0010	.0016	. 0027	. 0032	.0043	.0054	.0068	.0083	. 0084	0.17	21.0-2
2.0-23.0			. 0002	.0011	.0017	.0029	. 0033	.0041	.0050	.0062	.0116	.0117	0.17	22.0-Z
3.0-24.0			. 0002	. 0010	.0017	.0028	. 0035	.0043	. 0052	.0076	. 0237	, 0238	0.17	23,0-2
4.0-25.0			. 0001	.0010	.0016	. 0025	. 0031	. 0039	.0050	.0076	. 0142	.0143	0.17	24.0-2
5.0-26.0			. 0001	. 0009	.0015	.0024	. 0030	.0042	.0051	. 0062	, 0132	.0133	0.17	25.0-2
6.0-27.0			. 0001	.0010	.0015	. 0025	. 0030	.0038	.0047	. 0052	. 0073	. 0074	0.17	26.0-2
			1	1	I					1	1		1	1

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

	i i ja	· .	TABLE X-	DISTRI	BUTION OF	MERIDION	T MIND BHI	LARS				MERIDION DUT	AL WIND REBUTION	OHEAR V
TATION:		100	SANTA MONE	CA, CALIFO	RNIA							SANTA MON	ICA, CAL	JFORNIA
	E PERIOD: LEVATION		JULY 125 feet or 36), I meters k	(SL			7000				31	ır.	
	1,1											,		
TATION C	CORDINAT		34.01 dog N,					una i .					<u> </u>	<u>. </u>
ERIOD OF	OBSERVA	TION:	Long Beach, Santa Menica	California i California	fanuary 1, is April 18, is	956-April 17 956-Decemb	7, 1956 er 31, 1960	-14.						
ATA SOU	RCE:		National Wes U. S. Weathe	r Bureau								NO, OF OBS	FOR EA	CH FEAI
			Asheville, N. National Aer- Marshall Spa Aerophysics	orth Careline	Space Admir	istration							UNITS:	
REPARE			Marshall Spa Aerophysics	ce Flight Co and Astrophy	nter, Aerobe yeice Branch	ilistica Div , Huntaville	laion , Alabama					invers	e second	(eec - l)
	-3	·· ·	February 23,		AULATIVE I	TR/THTA/	T FREALE	VCY				Maximum	Pet.	Alt. La
i. Layer [MSL)			15.9	50.0	64.0	B4.1	90.0	.95,0	97.72	99.0	99.865	Shaar	Freq.	(MSL) km
km fc- 1.0	0, 135	2.20	.0004	. 6617	. 0025	.0037	.0045	. 0055	.0064	. 0078	.0117	.0118	0.16	efc- i
.0- 2.0			0006	.0020	.003)	. 0044	.0052	.0059	.0068	. 9076	. 0095	.0096	0.16	1.6- 2
0- 3.0			.0006	. 0021	.9032	8045	.0854	.0065	.0060	.0101	. 0134	. 0125	0.16	2.0- 3
5- 4.0			.0005	.0018	. 0030	0545	.0092	. 0061	. 0076	. 0085	. 0132	.0133	0.16	3.0- 4
0- 5.0			0005	. 5018	. 0025	.0039 .	0045	.0058	. 6676	. 0072	.0104	. 01,05	0.16	4.0- !
0- 6.0			. 0004	.0018	.0028	,6044	9048	.0057	.0064	. 0070	.0110	.0111	0, 16	5.0-
0- 7.0	3] :	.0004	.0017	. 0027	.0041	, 005à	.0064	.0079	. 0053	. 0135	. 0136	0.16	6.0-
.0- 8.0			.0004	. 0017	.0026	. 0038	.8049	.0064	.0080	. 0100	.0144	.0145	0.16	7.0-
.0- 9.0			. 8004	, 0018	.0027	.0038	.0046	.0063	.8075	.0081	. 0125	.0126	0.16	8.0-
.0-10.0			.0005	.0019	.0030	.0044	. 0054	. 0063	. 6876	.6090	. 0129	' o Í 20	0, 16	9.0-1
.0-11.0			.'8006	. 0020	,0631	.0046	.0057	0069	.0089	.6107	. 6249	. 0250	0.16	10.0-1
.0-12.8		0001	0006	,0019	. 0029	. 0044	. 0052	. 8067	. 0070	0107	.0174	. 0175	0.16	11.0-1
.0-13.0		1	. 0005	. 0022	.0030	. 0043	. 0052	. 0,069	.8084	. 8099	.0186	.0187	9, 16	12.0-l
.0-14.0			. 0005	. 6083	. 0034	.0051	.0059	.0074	.0094	.0112	.0136	.0139	0, 16	13.0-1
.0-15.0		. 8001	. 0007	, 0024	0038	. 0059	. 6072	. 0094	.0111	.0116	. 0295	. 0296	0, 14	14.0-1
. 0-16.6	l		0005	.0022	.0034	. 0052	.0061	. 9073	.0091	.0107	.0197	.0198	0.16	15.0-1
. 0-17. 0	1		.0005	. 0020	. 00 32	0047	6054	.0049	. 0078	.0090	.0132	. 0133	0.16	16,0-1
.0-18.0	ľ		.0004	.0018	. 9928	.0040	6050	.0061	. 0675	. 0083	.0117	.0110	0.16	17,0-1
.0-19.0	1		.0004	.0014	.0023	.0033	.0039	.0049	.9057	.0067	.0111	.0111	0.14	18.0-1
. 6-20.0			.0004	.0013	.0020	.0030	.0034	.0044	.0056	. 0069	. 0075	. 0099	0.16	19.0-2
.0-21.0			. 0002	.0011	.0018	. 0027	.0032	.0039	.0046	. 0055	. 6093	. 0074	0, 16	20.0-2
. 6-22. 0			0002	.0011	.0018	. 0026	.0031	.0039	. 0047	. 0055	.0074	. 0075	0.16	22.0-2
. 0-23, 0			.0002	.0911	.0017	.0026	. 0029	. 00 35	.0843	.0046	.0064	. 0065	0.16	33.6-2
3.0-24.0	1	.]	. 9002	.0010	.0016	. 0024	0030	.0038	. 0846	. 0055	.0073	.0074	0.16	24.0-2
1.0-25.0		1	.0002	.0011	.0016	.0026	.0032	.0039	. 0050	.0060	.0084	.0100	0.16	29.0-1
5,0-26.0			. 0002	. 0012	.0018	. 0029	. 0033	.0042	. 0053	0075	. 6125	.0100	0.16	26.8-
4.0-27.0	1	1	. 0002	.0013	.0018	. 0029	. 0035	.0044	.0053	, 5063	1 .0128	. 4154	1 *.1*	1

OAST Control				TABLE X	- 9 DIST	RIBUTION C	F MERIDIO	NAL WIND 5	HEARS				MERIDIO DIS	NAL WINI TRIBUTIO	
## AUGUST STATION COORDINATES 19 1 drag N 11 2 7 drag N		E PERIOD			ICA, CALIF	ORNIA							SANTA MO	NICA, CA	LIFORNIA
### PERIOD OF ORSERVATION Long Deach, California January 1, 1934-April 17, 1936 Sanuary 11, 1934-April 17, 1936 Sanuary 11, 1934-April 17, 1936 Sanuary 11, 1934-April 17, 1936 Sanuary 11, 1934-April 17, 1936 Sanuary 11, 1934-April 17, 1936 Sanuary 11, 1934-April 17, 1936 Sanuary 11, 1934-April 17, 1936 Sanuary 11, 1934-April 17, 19					38.1 meters	MSL									
PERIOD OF OBSERVATION Ling Reach, California January 1, 1914-April 17, 1994 Spea Monice, California April 11, 1994-December 31, 1940													Α	UGUST	
DATA SOURCE National Teather National Presental Registration PREPARED BY National Agent Early Registration National Agent Early Registrate National Agent Early Reg	STATION	COORDINAT	ES:	34.01 deg N	7, 118.27 de	g W									
D. S. Wester Durant Activity Decision Color Co	PERIOD OF	OBSERVA	TION:						o						
1.	DATA SOUL	RCE.				ds Center				- · · · · · · · · · · · · · · · · · · ·			NO. OF OB	S. FOR EA	ACH LEVEL
Nil Layer (MSL) 0.133 2.28 15.9 50.0 68.0 84.1 90.0 95.0 97.72 99.0 99.865 5hear Feq. (MSL) km af 1.0				Asheville, !	forth Caroli										
Nil Layer (MSL) 0.133 2.28 15.9 50.0 68.0 84.1 90.0 95.0 97.72 99.0 99.865 5hear Feq. (MSL) km af 1.0	PREPARE	BY:		National Ac Marshall Sp	ronautics an ace Flight C	d Space Adni enter, Aero	infatration ballistics Di	taion						UNITS:	
OAST Control				February 23	and Astrop	hysics Branc	h, Huntsvill	e, Alabama					inver	re second	(*ec ⁻¹)
March 0 135 2 28 13.9 50.0 84.0 84.1 90.0 93.0 97.72 99.0 99.65 00.0 1	Alt. Layer				Ct	MULATIVE	PERCENTA	GE FREQUE	NCY						Alt. Laye
1.0 · 2.0		0.135	2. ZF	15.9	5 0 .0	68.0	B4. I	90 0	95.0	97. 72	99.0	99.865	Shear	Freq.	
2.0 . 3.0	afc- 1.0			. 0005	.0017	. 0023	. 0034	.0040	.0047	.0058	.0064	. 0084	.0084	0.32	afc- 1.0
3.0 - 4.0 .0005 .0018 .0027 .0039 .0044 .0057 .0065 .0077 .0107 .0108 .0.16 3.0 - 4 .0.5 .0	1.0- 2.0			.0005	.0019	. 0029	.0043	.0049	.0060	. 0068	. 0089	.0114	. 0115	0.16	1.0- 2.1
4.0 - 5.0 .0004 .0017 .0026 .0036 .0042 .0050 .0060 .0071 .0081 .0084 0 16 4.0 - 5 5.0 - 6.0 .0005 .0016 .0024 .0036 .0043 .0053 .0063 .0072 .0083 .0084 0 16 5.0 - 6 6.0 - 7.0 .0004 .0015 .0023 .0034 .0042 .0053 .0061 .0069 .0111 .0112 0 16 6.0 - 7 7.0 - 8.0 .0004 .0017 .0025 .0038 .0044 .0052 .0062 .0075 .0092 .0093 .0.16 7.0 - 8 8.0 - 9.0 .0006 .0017 .0026 .0041 .0092 .0065 .0079 .0094 .0143 .0144 0 16 8.0 - 9 9.0 - 10.0 .0005 .0019 .0031 .0044 .0057 .0068 .0082 .0093 .0134 .0135 0 16 9.0 - 10 0.0 - 11.0 .0005 .0019 .0031 .0044 .0057 .0068 .0082 .0093 .0134 .0135 0 16 10.0 - 11 0.0 - 11.0 .0006 .0021 .0033 .0048 .0058 .0073 .0095 .0119 .0131 .0132 0 16 10.0 - 11 0.0 - 12.0 .0006 .0020 .0031 .0049 .0058 .0076 .0093 .0117 .0177 .0178 0.16 11.0 - 12 2.0 - 13.0 .0006 .0020 .0031 .0047 .0056 .0072 .0093 .0113 .0153 .0154 0.16 12.0 - 13 3.0 - 14.0 .0006 .0024 .0040 .0058 .0076 .0082 .0105 .0114 .0147 .0148 0.16 12.0 - 13 3.0 - 14.0 .0006 .0024 .0040 .0058 .0076 .0082 .0105 .0114 .0147 .0148 0.16 13.0 - 14 4.0 - 15.0 .0007 .0022 .0033 .0050 .0060 .0074 .0087 .0110 .0250 .0251 0.16 16.0 - 17 7.0 - 18.0 .0007 .0022 .0033 .0050 .0060 .0072 .0089 .0094 .0135 .0136 0.16 16.0 - 17 7.0 - 18.0 .0006 .0018 .0027 .0039 .0047 .0088 .0072 .0095 .0133 .0134 0.16 17.0 - 18 8.0 - 17.0 .0006 .0014 .0022 .0032 .0038 .0049 .0065 .0066 .0139 .0140 0.16 18.0 - 19 9.0 - 20.0 .0001 .0014 .0027 .0031 .0038 .0049 .0055 .0166 .0167 0.16 22.0 - 22 9.0 - 20.0 .0002 .0011 .0017 .0027 .0031 .0038 .0049 .0055 .0166 .0167 0.16 22.0 - 22 9.0 - 20.0 .0002 .0011 .0016 .0025 .0031	2.0- 3.0	ĺ		. 0005	.0020	.0030	. 0040	. 0049	. 0056	. 0071	. 0078	.0094	. 0095	0.16	2.0- 3.1
5.0 - 6.0	3.0- 4.0			. 0005	.0018	.0027	. 0039	.0044	. 0057	0065	.0077	.0107	.0108	0.16	3.0- 4.1
6.0 - 7.0 .0004 .0015 .0023 .0034 .0042 .0053 .0061 .0069 .0011 .0112 .016 .6.0 - 7.0 - 8.0 .0004 .0017 .0025 .0038 .0044 .0052 .0062 .0075 .0092 .0093 .0144 .0163 .0164 .0.6 - 7.0 - 8.0 .0006 .0017 .0026 .0041 .0052 .0065 .0079 .0094 .0143 .0144 .0164 .0.16 .8.0 - 9.0 9.0 - 10.0 .0005 .0019 .0031 .0044 .0057 .0068 .0082 .0093 .0134 .0135 .0136 .0135 .0136 .0137 .0132 .0166 .0.011 .0.0-11 .0.0-11.0 .0.006 .0021 .0033 .0048 .0058 .0073 .0095 .0119 .0131 .0132 .0.16 .10, -11 .0.12.0 .0.006 .0020 .0031 .0047 .0056 .0072 .0093 .0113 .0153 .0154 .0.16 .11, -0.12 .0.13 .0.14.0 .0.006 .0020 .0031 .0047 .0056 .0072 .0093 .0113 .0131 .0153 .0154 .0.16 .12, -0.13 .0.14.0 .0.006 .0024 .0040 .0058 .0070 .0082 .0105 .0114 .0147 .0148 .0.16 .12, -0.13 .0.14.0 .0.007 .0026 .0040 .0056 .0069 .0084 .0105 .0114 .0147 .0148 .0.16 .0.257 .0.16 .14, -0.15 .0.16 .0.007 .0022 .0033 .0050 .0060 .0074 .0087 .0110 .0250 .0251 .0.16 .16, -0.7 .0.18.0 .0.006 .0021 .0032 .0032 .0050 .0060 .0074 .0087 .0087 .0088 .0075 .0088 .0076 .0089 .0084 .0105 .0114 .0147 .0148 .0166 .0.17 .0.18.0 .0.007 .0022 .0033 .0050 .0060 .0074 .0087 .0087 .0088 .0094 .0133 .0134 .0146 .016 .10, -17 .018 .0.006 .0007 .0002 .0011 .0017 .0027 .0031 .0038 .0048 .0057 .0114 .0115 .0164 .0165 .0160 .0167 .0166 .016	4.0-5.0			.0004	. 0017	. 0026	. 0036	. 0042	. 0050	.0060	. 0071	.0083	.0084	0.16	4.0- 5,
7. 0 - 8. 0 .0004 .0017 .0025 .0038 .0044 .0052 .0062 .0075 .0092 .0093 0.16 7. 0 - 8. 6 8. 0 - 9. 0 .0006 .0017 .0026 .0041 .0052 .0065 .0079 .0094 .0143 .0144 .016 8. 0 - 9. 0 .0006 .0007 .0006 .0007 .0006 .0003 .019 .0031 .0044 .0057 .0068 .0093 .0134 .0135 .016 9. 0. 10 .0006 .0006 .0021 .0033 .0048 .0058 .0073 .0095 .0119 .0131 .0132 .016 10, 0.11 .0. 0.11 .0006 .0020 .0031 .0047 .0058 .0076 .0093 .0107 .0177 .0178 0. 16 11, 0. 11 .0. 11 .0. 16 11, 0. 11 .0. 16 11, 0. 12 .0. 16 11, 0. 12 .0. 16 11, 0. 12 .0. 16 11, 0. 12 .0. 16 11, 0. 12 .0. 16 11, 0. 12 .0. 16 11, 0. 12	5.0- 6.0			. 0005	. 0016	.0024	. 0036	.0043	. 0053	.0063	, 0072	.0083	.0084	0.16	5.0- 6.0
8.0 - 9.0	6.0- 7.0	Ì		. 0004	. 0015	.0023	. 0034	.0042	. 0053	.0061	.0069	.0111	.0112	0.16	6.0- 7.1
9.0-10.0 .0005	7.0- 8.0			. 0004	. 0017	. 0025	.0038	.0044	. 0052	. 0062	.0075	.009Z	.0093	0.16	7.0- 8.0
0.0-11.0	8.0- 9.0			. 0006	.0017	.0026	.0041	.0052	. 0065	. 0079	.0094	.0143	. 0144	0.16	8.0- 9.0
1.0-12.0	9.0-10.0	I		. 0005	. 0019	. 00 31	.0044	.0057	.0068	.0082	.0093	. 0134	. 0135	0.16	9.0-10.
2.0-13.0	0.0-11.0	I		.0006	. 0021	.0033	.0048	. 0058	.0073	. 0095	.0119	. 0131	. 01 32	0.16	10.0-11.0
3.0-14.0 .0006 .0024 .0040 .0058 .0070 .0082 .0105 .0114 .0147 .0148 0.16 13.0-14 4.0-15.0 .0007 .0026 .0040 .0056 .0069 .0084 .0105 .0124 .0256 .0257 0.16 14.0-15 5.0-16.0 .0007 .0022 .0033 .0050 .0060 .0074 .0087 .0110 .0250 .0251 0.16 15.0-16 6.0-17.0 .0005 .0020 .0032 .0050 .0060 .0072 .0089 .0094 .0135 .0136 0.16 16.0-17 7.0-18.0 .0006 .0018 .0027 .0039 .0047 .0058 .0072 .0095 .0133 .0134 0.16 17.0-18 8.0-19.0 .0004 .0014 .0022 .0032 .0038 .0049 .0065 .0086 .0139 .0140 0.16 18.0-19 9.0-20.0 .0003 .0012 .0018 .0027 .0031 .0034 .0042 .0065 .0123 .0124 0.16<	1.0-12.0	l		.0006	. 0020	. 00 31	. 0049	. 0058	.0076	.0093	.0107	. 0177	0178	0.16	11.0-12.
4.0-15.0 .0007 .0026 .0040 .0056 .0069 .0084 .0105 .0124 .0256 .0257 0.16 14.0-15 .056 .0124 .0256 .0257 0.16 14.0-15 .056 .0125 .01	2.0-13.0	ĺ		.0006	. 0020	.0031	.0047	. 0056	. 0072	.0093	.0113	. 0153	0154	0.16	12.0-13.
5 0-16.0 .0007 .0022 .0033 .0050 .0060 .0074 .0087 .0110 .0250 .0251 0.16 15.0.16 6.0-17.0 .0005 .0020 .0032 .0050 .0060 .0072 .0089 .0094 .0135 .0136 0.16 16.0-17 7.0-18.0 .0006 .0018 .0027 .0039 .0047 .0058 .0072 .0095 .0133 .0134 0.16 17.0-18 8.0-19.0 .0004 .0014 .0022 .0032 .0038 .0049 .0065 .0086 .0139 .0140 0.16 18.0-19 9.0-20.0 .0003 .0012 .0018 .0027 .0034 .0042 .0054 .0065 .0123 .0124 0.16 19.0-20 0.0-21.0 .0003 .0011 .0017 .0027 .0031 .0038 .0048 .0057 .0114 .0115 0.16 20.0-21 1.0-22.0 .0002 .0011 .0017 .0027 .0032 .0038 .0042 .0055 .0063 .0064 .0.16	3.0-14.0	l		.0006	. 0024	.0040	. 0058	. 0070	. 0082	.0105	.0114	.0147	.0148	0.16	13.0-14.1
6.0-17.0	4.0-15,0			. 0007	. 0026	.0040	. 0056	. 0069	. 0084	.0105	.0124	.0256	. 0257	0.16	14.0-15.0
7.0-18.0 .0006 .0018 .0027 .0039 .0047 .0058 .0072 .0095 .0133 .0134 0.16 17.0-18 8.0-19.0 .0004 .0014 .0022 .0032 .0038 .0049 .0065 .0086 .0139 .0140 0.16 18.0-19 9.0-20.0 .0003 .0012 .0018 .0027 .0034 .0042 .0054 .0065 .0123 .0124 0.16 19.0-20 0.0-21.0 .0003 .0011 .0017 .0027 .0031 .0038 .0048 .0057 .0114 .0115 0.16 20.0-21 1.0-22.0 .0002 .0011 .0017 .0027 .0032 .0038 .0042 .0055 .0063 .0064 0.16 21.0-22 2.0-23.0 .0002 .0010 .0018 .0027 .0031 .0039 .0046 .0055 .0166 .0167 0.16 22.0-23 3.0-24.0 .0002 .0011 .0017 .0025 .0030 .0040 .0049 .0057 .0168 .0169 0.16<	5.0-16.0	1		.0007	. 0022	.0033	.0050	.0060	. 0074	.0087	.0110	.0250	. 0251	0.16	15.0-16.0
8.0-19.0	6.0-17.0			.0005	. 0020	. 00 32	. 0050	. 0060	. 0072	.0089	.0094	.0135	.0136	0.16	16.0-17.0
0.0-20.0	7.0-18.0	ļ		.0006	. 0018	. 0027	. 0039	.0047	.0058	. 0072	. 0095	.0133	.0134	0.16	17.0-18.0
0.0-21.0	B. 0 - 19. 0	l		.0004	. 0014	. 0022	. 0032	, 00 3B	. 0049	. 0065	. 0086	.0139	.0140	0.16	18.0-19.0
1.0-22.0 .0002 .0011 .0017 .0027 .0032 .0038 .0042 .0055 .0063 .0064 0.16 .21.0-22 2.0-23.0 .0002 .0010 .0018 .0027 .0033 .0039 .0046 .0055 .0166 .0167 0.16 .22.0-23 3.0-24.0 .0002 .0011 .0017 .0025 .0030 .0040 .0049 .0057 .0168 .0169 0.16 23.0-24 4.0-25.0 .0002 .0010 .0016 .0025 .0031 .0036 .0043 .0052 .0064 .0055 .016 24.0-25 5.0-26.0 .0001 .0016 .0023 .0029 .0040 .0053 .0063 .0090 .0091 0.16 .25.0-26	9.0-20.0	ŀ		.0003	. 0012	. 0018	. 0027	. 00 34	. 0042	.0054	.0065	.0123	.0124	0.16	19.0-20.0
2.0-23.0	0.0-21.0			.0003	. 0011	. 0017	. 0027	. 0031	. 0038	.0048	. 0057	.0114	. 0115	0.16	20.0-21.0
1.0-24.0	1.0-22.0	į		. 0002	. 0011	.0017	. 0027	. 00 32	. 0038	.0042	. 0055	.0063	. 0064	0.16	21.0-ZZ,0
1.0-25.0 .0002 .0010 .0016 .0025 .0031 .0036 .0047 .0052 .0064 .0065 0.16 24.0-25 5.0-26.0 .0001 .0010 .0016 .0023 .0029 .0040 .0053 .0063 .0090 .0091 0.16 25.0-26	2.0-23.0	l		. 0002	. 0010	.0018	. 0027	.0033	. 0039	.0046	. 0055	.0166	. 0167	0.16	22.0-23.0
5.0-26.0 .0001 .0010 .0016 .0023 .0029 .0040 .0053 .0063 .0090 .0091 0.16 .25.0-26	3.0-24.0	ŀ		, 0002	.0011	.0017	. 0025	0030	. 0040	.0049	. 0057	.0168	.0169	0.16	23.0-24.0
	4.0-25.0	- 1		.000Z	.0010	.0016	. 0025	.0031	. 0036	.0041	. 0052	. 0064	. 0065	0.16	24.0-25.0
6.0-27.0	5, 0-26, 0	- 1		.0001	. 0010	. 0016	. 0023	. 0029	. 9940	0053	. 0063	. 0090	. 0091	0.16	25.0-26.0
	6.0-27.0			.0001	0012	.0017	. 0027	. 00 32	.0040	. 0049	.0064	.0117	.0118	0,16	26.0-27.0
	1														i

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

			TABLE X-1	0 DISTR	IBUTION OF	MERIDION	AL WIND SH	EARS				MERIDION DIS	AL WIND	
STATION:			SANTA MONI	CA, CALIF	ORNIA	•					I	SANTA MOI	IICA. CA	JEORNIA
REFERENC			SEPTEMBER								}	JANTA MOI	, CA	
STATION F	LEVATION	I:	125 feet or 3	B. I meters l	MSI.							SI	РТЕМВЕ	R
STATION C	COORDINAT	ES:	34.01 deg N,	118.27 deg	w									
PERIOD OF	OBSERVA	TION:	Long Beach, Santa Monica	California California	January I, I April 18, I	956-April 1 956-Decemb	7, 1956 per 31, 1960							
DATA SOU	RCE:		National Wea	r Bureau								NO, OF OR	FOR EA	CH LEVEL-
PREPARE	D BY:	-	Asheville, No National Aero Marshall Spa Aerophysics February 23.	onautice and ce Flight Ce and Astroph	Space Admi enter, Aerob ysice Branc	nistration allistics Div h. Huntsville	ision , Alabama					inver	UNITS:	(sec ⁻¹)
Alt. Layer					MULATIVE	PERCENTAG	SE FREQUE	NCY				Maximum	Pct.	Alt. Layer
(MSL) km	0.135	2. ZB	15.9	50.0	68.0	64.1	90.0	95. U	97. 72	99.0	99.865	Shear	Freq.	(MSL) km
sfc~ 1.0			. 0004	.0017	. 00 25	.0037	. 0044	. 0052	. 0065	. 0077	.0100	0101	0,17	•fc- 1,0
			.0004	.0017	.0025	.0047	.0058	.0067	.0078	. 0046	.0141	.0142	0,17	1,0-2,0
1,0- 2,0; 2,0- 3,0;			.0007	. 0021	.0032	.0050	.0058	.0070	. 0080	0089	.0113	.0114	0,17	2.0-3.0
			.0005	. 0021	. 0032	.0046	.0055	,0063	.0074	.0092	.0139	.0140	0, 17	3.0-4.0
3.0-4.0			.0006	. 0019	. 0029	.0038	. 0051	.0062	. 0072	,0093	.0127	.0128	0.17	4.0- 5.0
4,0-5,0			0005	.0019	.0028	.0040	. 0047	.0058	.0068	.0084	.0124	0125	0.17	5,0-6.0
5.0-6.0				,					.0077	.0081	.0099	0100	0.17	6.0- 7.0
6,0-7.0			.0005	. 0017	.0028	.0041	. 00 47	.0060	1		.0152	.0153	0,17	7.0-8.0
7,0-8.0		į	.0004	. 0019	.0028	,0042	, 0053	.0062	.0074	.0105	0186	.0187	0.17	8.0- 9.0
8.0- 9.0			. 0005	. 0019	. 0029	.0044	.0051	.0061	.0078	.0090	0209	. 0210	0.17	9.0-10.0
9,0-10,0		.0001	. 0006	. 0019	.0028	. 00 43	.0052	.0063	.0081		0177	. 0210	0,17	10.0-11.0
10,0-11.0		ĺ	. 0006	. 0019	. 0030	. 00 47	.0058	.0074	.0092	.0117			1	11,0-12,0
11.0-12.0			. 0005	. 0021	. 0033	. 0049	. 0065	.0084	.0110	.0140	.0184	.0185	0,17	12.0-13.0
12.0-13.0		.0001	.0008	. 0022	. 0033	. 0049	. 0059	.0078	.0091	.0105	.0123	, , , , ,	1	1
13.0-14.0			.0006	. 0022	. 0035	.0052	.0063	. 0077	.0093	.0109	,0174	. 0175	0,17	13.0-14.0
14, 0-15. 0			.0005	. 00 20	. 0032	.0048	.0058	.0078	.0102	.0118	.0216	. 0217	0.17	14.0-15.0
15.0-16.0			. 0005	. 0023	. 0034	.0051	.0058	. 0076	.0098	.0123	, 0175	. 0176	0.17	15.0-16.0
16,0-17,0		l	.0006	. 0020	. 0030	. 0045	.0056	.0077	.0086	.0114	.0174	.0175	0.17	16.0-17.0
17.0-18.0		Ĭ	. 0005	. 0020	.0029	.0041	.0050	.0058	.0075	.0100	.0164	,0165	0.17	17.0-18.0
18.0-19.0]	.0004	.0015	.0024	.0035	. 00 41	. 0051	,0068	.0084	.0168	.0169	0.17	18.0-19.0
19.0-20.0		1	.0004	.0013	.0021	.0031	. 0039	, 0053	.0060	,0087	.0133	,0134	0.17	19.0-20,0
20,0-21,0			.0002	.0012	. 00 20	. 0031	.0036	.0044	.0054	. 0077	.0096	. 0097	0.17	20.0-21.0
21.0-22.0]	. 0002	.0011	.0018	. 0029	.0034	. 0044	. 0059	.0070	.0144	. 0145	0.17	21.0-22.0
22, 0-23. 0		İ	. 0002-	. 0010	.0017	. 0025	. 0033	.0038	. 0053	, 0063	.0071	.0072	0,17	22.0-23.0
23.0-24.0		1	. 0002	. 0009	.0015	. 0025	. 0029	. 0039	. 00 48	.0054	.0102	.0103	0.17	23.0-24.0
24.0-25.0			. 0002	.0010	.0015	.0023	. 0029	,0035	. 00 46	.0056	.0098	. 0099	0.17	24.0-25.0
25.0-26.0			.0002	. 0009	.0014	.0023	, 00 ZB	.0035	. 00 45	.0054	.0135	, 0136	0.17	25.0-26.0
26.0-27.0			.0001	. 0009	.0014	.0023	.0028	, 0036	. 0043	.0072	.0145	.0146	0.17	26.0-27.0
10.TF (1) W		ant fragues	icy of minimur	n ehear exc	eded 2, 28 a	nd/or 0 135	cumulative s	ercentage (r	equency, th	shear asso	ciated wit	h the cumulativ	e percent	age frequent

NOTE: (1) When the percent frequency of minimum shear exceeded 2, 28 and/or 0, 135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

		, e	TABLE X-	(1 D181	RIBUTION O	F MERIDIO	IAL WIND SI	TEARS				MERIDION	IAL WHI PRIBUTION	
TATION:			BANTA MON	ICA, CALLE	AINRO		,	-	:			SANTA MO	RCA. CA	LIFORNIA
	CE PERIOE		OCTOBER				<u> </u>							
TATION I	elevátioi		125 feet or 1	8. [metere	MSL		-				L	Ġ	CTOBER	
TATION (COORDINA	rts:	34.01 deg N.	118.27 dos	Ŵ									
												•		
PERIOD O	F OBSERV	TION:	Long Beach, Santa Monice	California , California	January I. April 18,	1956-April 1 1956-Decem	7, 1956 ber 31, 1960					, ,		-
UOE ATA	RCE:		National Was	ther Record	ie Center							NO. OF ORE	FOR E	ACH LEVI
			U) S. Weath Asheville, N	orth Carolin									620	
REPARE	D BY:		National Aer Marshall Spa Aerophysics	onautics and	Space Admi	nistration	ision				=,		UNITS	
			Aerophysics February 23	and Astropi	yelce Brane	h, Huntevill	e, Alabama					inver	e second	{sec = 1} .
. Layer		·			MULATIVE	PERCENTA	GE FREQUE	NCY		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Maximum	Pct.	Alt. Lay
M3L) km	0.135	2.28	1519	50.0	64.0	84.1	90,4	95.0	97,72	77.0	79.865	Shear	Freq.	(MSL)
[c - 1, 0			. 0005	. 00 20	0031	. 00 49	68 57	. 0071	.0085	,0104	. 0150	.0151	0, 16	sfe- l
. 0 - 2, 0			.0007	. 0022	.0931	.0044	.0052	.0070	.0080	.0093	.0156	.0157	0.16	1.0. 2
0- 3.0			.0006	. 0021	.0030	. 6043	.0051	,0063	.0078	.0092	.5146	. 01 47	0,16	2.0- 3
,0- 4.0	., .		.0005	. 0021	.0031	.0044	0054	. 0073	.0090	.0100	.0115	.0116	0, 16	3.0- 4
.0- 5.0			.0006	. 0021	.0030	.0045	.0056	.0074	.0092	.0110	. 0232	.0233	0.16	4.0- 5
0- 6.0	,		.6006	. 0026	.0030	. 0046	.0057	.0071	.0086	. 6103	, 0284	.0285	0.16	5.0- 6
.0- 7.0			,0006	, 00 20	.0029	.0044	.0052	.0067	.0088	.0109	.0344	. 0345	9, 16	6.0- 7
. 0- 0, 0	!! .		.0005	. 0019	.0028	.0044	.0054	. 0069	.0087	0100	.0310	.0311	0.14	7.0- 8
.0- 9.0	1	, 0061	.0005	0019	.0031	. 9047	.0662	. 9084	.0109	.0124	.0167	.0150	0, 16	8.0- 9
.0-10.0			. 0006	. 9021	.0032	. 6051	.0066	. 0085	0105	,8534	.6279	. 0280	0.16	9.0-10
,0-11,0		.0001	.0007	. 0022	. 0035	. 0056	. 0071	0092	.0113	. 0397	.0188	.0259	0,16	10.0-11
. 0 - 12. 0			. 9006	.0024	. 9037	.0059	.0072	. 4090	.0104	.0129	.0199	.0200	0, 16	11.0-12
, 0-13.0	-	.0001	.0007	. 0027	.0047	.0052	. 0076	.0100	0135	.0147	. 0246	.0246	0,16	12.0-13
.0-14.0		1	. 0006	. 0025	. 9037	. 0058	. 8075	.0101	.0136	0149	. 0220	.0223	0.16	13.0-14
. 0-15. 0			. 0005	. 9423	. 0033	. 6050	.0060	. 0077	.0099	,6134	. 6226	. 0227	0.16	14.0-15
0-16.0			. 0006	. 0019	.0028	.0944	. 0056	. 0070	.0090	. 8304	0131	.0132	0.16	15.0-16
.0-17.0			. 0003	. 0019	.0028	.0041	. 0051	, 0068	.0077 3	,0099	. 0223	.0224	0.16	16.0-17
0-15.0	1		.0005	. 0017	.0027	. 00 40	. 0047	. 0062	0078	. 0092	. 0143	,70144	6, 16	17.0-16
D-19 _. 0	1 1		.0004	.0015	.0024	0036	. 9041	. 0052	. 0062	. 9973	.0195	.0194	0.16	18.0-19
0-20.0			.0003	.0014	. 0022	. 0035	.0041	. 0051	. 0065	. 9074	. 0223	. 0284	0.14	19.0-20
.0-21.0			.0003	.0012	. 0020	. 003Z	. 0039	. 9051	. 0060	. 0073	. 0093	.0094	0. 16	30.0-21
0-21, 0		:	.0003	.0011	.0010	. 0032	.0038	. 90 46	0060	.0070	0110	.0111	0, 16	21.0-22
0-23.0		: }	.0003	. 0012	9620	. 0031	. 0040	. 0053	.0064	. 0079	.0118	6119	0, 16	22.0-23.
0-24.0	-4	,	. 0003	0011	.0018	. 0029	, 0036	. 00 47	.0055	.0074	. 01 40	.01.41	0.16	23. 0-24.
, 0 - 25. 0			.0003	.0011	. 00 20	. 0031	.0034	.0045	,0057	.0072	,0104	.0109	0.16	24.0-28
. 0 - 26 . 0		ŀ.	. 0002	. 0011	. 0017	. 0028	. 0035	. 8047	.0060 1	,0070	.0094	.0095	0.16	25.0-26.
0-27,0			.0002	. 6010	. 0017	. 0025	.0032	. 00-46	.0054	.0069	.0085	.01.86	9, 16	36.0-27.

OTE: (1) When the percent frequency of minimum sheer exceeded 2.26 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency.

			TABLE X-	2 DIST	IO NOITUBLE	MERIDION	AL WIND SH	EARS				MERIDION DIS	IAL WINE	
STATION:			SANTA MON	ICA, CALIF	ORNIA	-						SANTA MON	ICA, CAI	IFORNIA
	E PERIOD		NOVEMBER				 	 						
STATION I	LEVATION	ı:	125 feet or 3	e, i meters	MJL							,	OVEMBI	a.
STATION C	COORDINAT	ES:	34.01 deg N,	118.27 deg	W									
PERIOD OF	F OBSERVA	TION:	Long Beach, Santa Monica	California , California	January I, I April 18, I	956-April 1 956-Decemb	7, 1956 ser 31, 1960							
DATA SOU	RCE:		National Wes	er Bureau								NO, OF OB	600 E	CH LEVEL:
PREPAREI	D BY:		Asheville, N National Aer Marshall Spe Aerophysics	orth Carolin onautics and ics Flight Co	space Admi enter, Aerob	nistration allistics Div	ision		·			+	UNITS:	J
			Aerophysics February 23	and Astroph 1962	yaics Branci	h, Huntsville	, Alabama					Invare	a second	(sec ⁻¹)
Alt. Layer				CU	MULATIVE I	PERCENTAC	E FREQUE	NCY				Maximum	Pct.	Alt. Layer
(MSL) km	0.135	Z. Z8	15.9	50.0	68.0	B4.1	90.0	95.0	97. 72	99.0	99.863	Shear	Freq.	(MSL) km
afc- 1.0			. 0007	. 0025	. 0038	.0051	.0063	. 0075	. 0101	.0131	.0188	. 0189	0.17	sfc- 1.0
1.0- 2.0			.0005	. 00 20	. 0030	. 0048	. 0059	.0072	. 0089	.0109	.0136	, 0137	0, 17	1,0- 2.0
Z. 0 3. 0 ¹			. 0007	, 0023	. 0032	. 0050	. 0062	. 0085	. 0122	. 0153	. 0225	0226	0, 17	2,0- 3.0
3.0- 4.0			. 0006	. 0021	. 0029	. 0046	. 0059	. 0060	. 0097	. 0133	.0257	. 0258	0, 17	3.0- 4.0
4,0-5.0		1000.	. 0006	. 00 20	. 0030	.0044	. 0035	. 0072	. 0085	. 0109	.0222	0223	0, 17	4.0- 5.0
5,0- 6.0			. 0006	. 00 20	. 0031	. 00 47	. 0055	. 0068	. 0081	.0104	,0283	, 0284	0.17	5.0- 6.0
6,0-7.0			, 0005	. 0019	, 0029	. 0048	. 0059	.0084	.0104	. 0129	,0183	.0184	0.17	6.0- 7.0
7,0-8.0			. 0006	. 0022	.0034	. 0051	. 0059	. 00,76	. 0095	. 0136	.0165	.0166	0.17	7.0- 6.0
8,0- 9.0			. 0006	. 0020	. 0031	. 0051	. 0066	, 0081	.0113	.0136	. 0331	. 0332	0, 17	8.0-9.0
9, 0-10, 0		-	. 0007	.0024	. 0037	. 0061	. 0071	,0101	. 0123	.0141	.0357	. 0358	0.17	9.0-10.0
10.0-11.0			. 0005	.0024	. 0036	. 0058	.0074	. 0093	, 0123	.0145	.0190	.0191	0.17	10.0-11.0
11,0-12.0		.0001	.0008	. 0027	.0041	. 0063	. 0078	. 0096	.0114	.0144	.0157	.0158	0.17	11.0-12.0
12.0-13.0			.0008	. 0028	. 0044	. 0067	.0083	. 0109	. 0135	. 0157	. 0370	. 0371	0.17	12.0-13.0
13,0-14.0			.0007	. 0027	.0042	. 0063	. 0078	. 0101	.0123	. 0156	.0263	0264	0.17	13.0-14.0
14,0-15.0		. 0001	.0006	. 0023	.0035	. 0051	. 0066	. 0082	.0123	.0147	.0242	0243	0.17	14.0-15.0
15,0-16.0			.0006	. 0020	.0030	. 0048	.0058	.0074	.0087	,0124	.0188	.0189	0.17	15.0-16.0
16,0-17,0			. 0005	.0018	.0030	. 0044	. 0055	. 0066	.0084	. 0115	,0166	,0167	0, 17	16.0-17.0
17.0-18.0			.0005	. 0016	.0025	. 0038	. 0046	. 0055	. 0071	. 0093	.0161	.0162	0.17	17.0-18.0
18,0-19.0			.0004	. 0016	.0024	.0034	. 00 40	, 0054	.0073	. 0086	.0189	.0190	0.17	18.0-19.0
19.0-20.0			.0003	. 0015	.0022	. 0033	.0041	. 0051	.0067	.0081	.0101	,0102	0,17	19.0-20.0
20.0-21.0			.0004	. 0015	. 0023	.0033	.0042	, 0057	. 0079	.0094	.0156	. 0157	0.17	20.0-21.0
21,0-22.0			.0004	, DO14	.0022	.0033	.0041	. 0052	.0071	0106	.0175	.0176	0.17	21.0-22.0
22, 0 - 23, 0		ļ ·	.0003	. 0012	.0019	. 0030	.0036	. 0044	.0051	.0064	.0124	.0125	0.17	22.0-23.0
23.0-24.0			. 0003	. 0013	.0020	. 0032	. 0039	. 0051	.0060	.0001	.0168	.0169	0.17	23.0-24.0
24.0-25.0			. 0004	, 0013	. 0021	. 0030	.0037	. 0051	.0064	. 0076	.0092	. 0093	0.17	24, 0-25, Q
25, 0 - 26, 0		1	. 0003	.0012	. 0020	, 0029	. 0035	. 00 47	.0062	. 0070	.0131	.0132	0, 17	25,0-26,0
26.0-27.0			, 0003	. 0013	.0020	.0031	.0039	, 00 47	.0059	.0071	.0108	.0109	0.17	26.0-27.0
		L				L			~		<u> </u>	<u></u>		l

NOTE: (1) When the percent frequency of minimum shear exceeded 2.28 and/or 0.135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency exceeded was not determined.

TABLE X-13 DISTRIBUTION OF MERIDIONAL WIND SHEARS												MERIDIONAL WIND SHEAR DISTRIBUTION		
STATION: SANTA MONICA, CALIFORNIA REFERENCE PERIOD: DECEMBER												SANTA MONICA, CALIFORNIA		
	CE PERIOD ELEVATION		DECEMBER 125 feet or 36.1 meters MSL									DEÇEMBER		
J. R. I. W. IV.														
STATION COORDINATES: 34.01 deg N, 118.27 deg W											•			
PERIODO	F OBSERVA	TION:	Long Beach, California January I, 1956-April 17, 1956											
- ERIOD U	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Santa Menic	. California	April 18,	1956 - Decem	ber 31, 1960							
DATA SOURCE:			National Weather Records Center U. S. Weather Bureau									NO, OF OBS. FOR EACH LEVE		
PREPARED BY:			Ashaville, North Carolina National Aeronautics and Space Administration Marshall Space Flight Center, Aerobalifictics Division Aerobalifice and Aerophysics Branch, Huntaville, Alabama Aerophysics and Aerophysics Dranch, Huntaville, Alabama									620 UNITS:		
												inverse second (sec-1)		
			February 23	, 1962										
t. Layer (MSL)		, ,,	1 17.4	50. o	MULATIVE 68.0		GE FREQUE	NCY 55.0	97, 72	99.0	99.865	Maximum Shear	Pct. Freq.	(MSL)
km .	0.135	2.24	15, 9	-		84.1	·					t		km
efc- 1.0	.	, 0001	. 0007	. 0027	.0040	0057	.0067	.0085	,0104	-,0117	.0154	0155	0.16	sfc- i.
.0. 2,0		1080,	.0006	. 0021	.0032	. 00 49	, 0057 ¹	. 0086	. 0089	.0113	.0191	.0192	0.16	1.0- 2
2,0- 3,0			, 0006	. 0021	.0033	.0051	.0068	. 0090	.0114	.0143	. 0212	. 0213	0.16	2.0- 3.
3,0- 4,0		. 0001	. 0007	. 0021	.0032	. 9046	.0060	, 0078	.0091	.0127	. 0235	. 0236	0, 16	3.0- 4
4.0- 5.0			.0006	. 0022	0034	.0051	. 0060	.0078	.0108	. 0123	. 0268	. 0269	0.36	4.0- 5.
3.0- 6.0		0001	, 0006	. 0020	0030	10046	. 0057	. 0073	. 0099	. 0145	. 0255	. 0256	0.16	5.0- 6.
6.0- 7,0			.0005	.0019	.0033	.0052	. 0069	. 0087	.0115	, 0146	. 0206	, 0207	0. 16	6.0- 7.
7.0- 8.0			.0006	. 0022	.0033	.0050	,0064	.0078	. 009Z	. 0126	. 0242	. 0243	0.16	7.0- 8.
9.0- 9.0		. 0001	. 0007	.0023	. 0033	.0050	.0063	.0083	.0111	,0130	.0281	. 0282	0.16	8.0- 9.
9.0-10.0			.0006	. 00 25	.0040	. 0059	.0072	, 0098	.0132	. 0146	. 0293	. 0294	0.16	9,0-10.
0.0-31,0	- 1	. 0001	.000a	.0029	. 0043	.0067	.0078	,0103	, 0133	0149	. 0245	. 0246	0.16	10.0-11.
1,0-12,D			.0008	. 0031	, 9047	.0074	.0091	,0128	. 0165	.0210	. 0260	. 0261	0.16	11,0-12.
2, 9-13, 0		. 0001	0009	. 0032	.0031	.0076	. 0095	, 6126	.0155 .	.0187	.0281	. 0282	0.16	12.0-13.
3, 0-14, D			.0008	, 6630	.0045	, 6071	.0007	9190	.0138	.0164	.0211	. 0212	9, 16	13.0-14.
4.0-15.0		. 0001	.0006	,0023	5039	. 6059	, 0070	.0090	,0114	.0143	.0217	.0218	0.16	14.0-15.
5.0-16.0			.0005	, 00 20	.0032	.0048	.0059	.0074	,0088	.0118	.0192	,0193	0.16	15.0-16.
6.0-17,0			0005	. 602)	.0031	.0046	. 9956	,0066	,0087	.0123	.0190	.0191	0, 16	16,0-17.
7.0-18.0			0005	.0019	0029	.0044	.0054	.0065	. 0077	.0100	.0195	.0196	0.16	17.0-18,
3.0-19.0	, i		,0004	,0016	.0024	.0038	. 00 47	, 9960	.0072	.0089	.0108	.0109	0.16	18.0-19.
. 0-20, 0	٦		.0004	. 0016	., 0023	. 0037	.0044	. 0068	. 0079	, 0096	.0132	.0133	0.16	19.0-20.
. 0-21. C			,0003	,0013	. 0022	0034	.0041	, 0051	. 9067	.0080	.0101	.0102	0.16	20.0-21.
. 0-22, 0		'	. 0003	,0014	.0022	.0032	, 0041	. 0052	.0066	. 0079	. 01 40	.0141	0.16	21.0:22.
. 0-23, 0			.0004	, 0013	. 0020	, 0032	. 00-42	. 0054	, 0066	. 0075	.0185	. 0186	0, 16	22.0-23.
3.0-24.0			,0003	.0012	.0021	. 0031	. 9037	. 0047	.0061	.0080	.0161	.0162	0.16	23, 0-24.
4, 0 - 25, 0			.0003	,0012	, 00 20	, 0031	.0038	.0047	.0059	.0076	.0253	. 0254	D. 16	24.0-25
5.0-26,0			. eőőe .	,0013	, 0021	. 0032	. 0039	.0048	. 0060	. 0070	.0102	. 0103	0.16	25.0-24.
6.0-27.0		1	.0002	.0012	.0019	. 0030	.0037	0048	,0056	.0065	.0109	.0110	0.16	26.0-27.

NOTE: (1) When the percent frequency of minimum shear exceeded 2, 26 and/or 0, 135 cumulative percentage frequency, the shear associated with the cumulative percentage frequency constants.

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